

10/622687

=> s l1

SAMPLE SEARCH INITIATED 15:32:11 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 779 TO ITERATE

100.0% PROCESSED 779 ITERATIONS 1 ANSWERS  
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 13906 TO 17254  
PROJECTED ANSWERS: 1 TO 80

L2 1 SEA SSS SAM L1

=> s l1 sss full

FULL SEARCH INITIATED 15:32:19 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 15374 TO ITERATE

100.0% PROCESSED 15374 ITERATIONS 57 ANSWERS  
SEARCH TIME: 00.00.01

L3 57 SEA SSS FUL L1

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	161.76	161.97

FILE 'CAPLUS' ENTERED AT 15:32:26 ON 29 MAY 2005  
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FILE COVERS 1907 - 29 May 2005 VOL 142 ISS 23  
FILE LAST UPDATED: 27 May 2005 (20050527/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l3

L4 25 L3

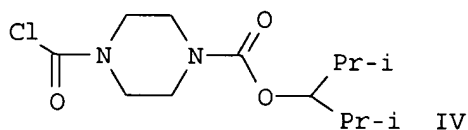
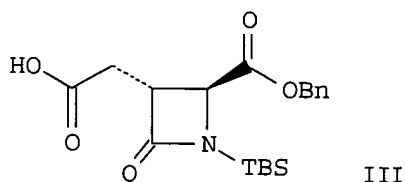
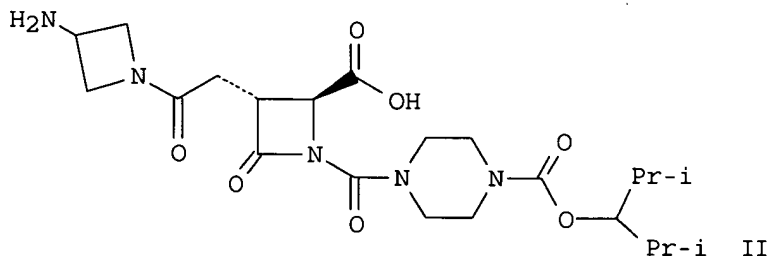
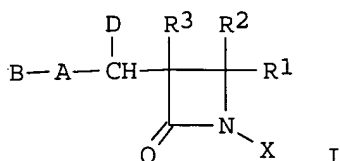
=> d l4 1-25 bib abs hitstr

L4 ANSWER 1 OF 25 CAPLUS COPYRIGHT 2005 ACS on STN  
AN 2004:612492 CAPLUS  
DN 141:156959  
TI Preparation of  $\beta$ -lactam compounds as inhibitors of tryptase  
IN Bisacchi, Gregory S.; Sutton, James C.; Slusarchyk, William A.; Treuner,

10/622687

Uwe; Zhao, Guohua  
 PA USA  
 SO U.S. Pat. Appl. Publ., 109 pp.  
 CODEN: USXXCO  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2004147502	A1	20040729	US 2003-728276	20031204
PRAI	US 2002-434060P	P	20021217		
OS	MARPAT 141:156959				
GI					



AB Beta lactam compds., such as I [R1 = H, carboxy, alkoxy carbonyl, alkenylaryl, CO-heterocyclyl, etc.; R2, R3 = H, alkyl; D = H, ORa; Ra = H, alkyl; A = CO-heterocyclyl, cycloheterocyclyl-CO, substituted amido, cycloalkyl, aryl, heteroaryl, cycloheteroalkyl; B = amino, aminoalkyl, aminocycloalkyl, cycloheteroalkyl, aryl, heteroaryl, alkylamino, carboxamido], are prepared. Thus, II was prepared via a multistep synthetic sequence starting from [1-(diphenylmethyl)-3-azetidinyl]-carbamic acid-1,1-dimethylethyl ester, III, and piperazinyl derivative IV. These compds. are useful as inhibitors of tryptase, thrombin, trypsin, Factor Xa, Factor VIIa, and urokinase-type plasminogen activator and may be employed in preventing and/or treating asthma and allergic rhinitis.

IT 705962-19-2P 705962-20-5P 727725-29-3P  
 727725-31-7P 727725-32-8P 727725-33-9P  
 727725-37-3P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

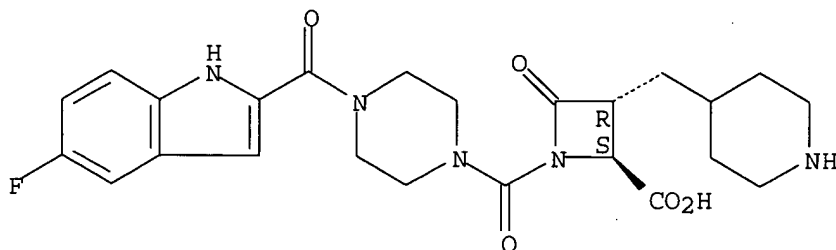
(preparation of  $\beta$ -lactam compds. as tryptase inhibitors)

RN 705962-19-2 CAPLUS

10/622687

CN 2-Azetidinecarboxylic acid, 1-[[4-[(5-fluoro-1H-indol-2-yl)carbonyl]-1-piperazinyl]carbonyl]-4-oxo-3-(4-piperidinylmethyl)-, (2S,3R)- (9CI) (CA INDEX NAME)

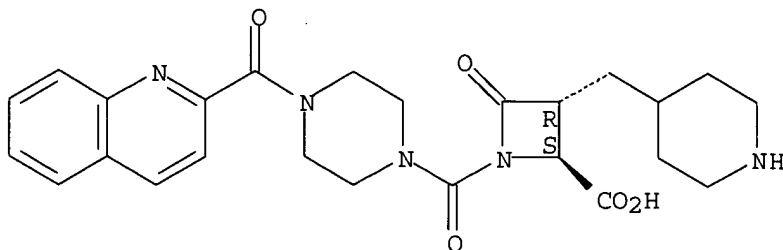
Absolute stereochemistry.



RN 705962-20-5 CAPLUS

CN 2-Azetidinecarboxylic acid, 4-oxo-3-(4-piperidinylmethyl)-1-[[4-(2-quinolinylcarbonyl)-1-piperazinyl]carbonyl]-, (2S,3R)- (9CI) (CA INDEX NAME)

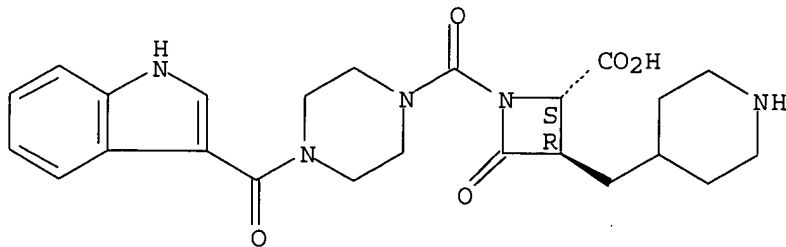
Absolute stereochemistry.



RN 727725-29-3 CAPLUS

CN 2-Azetidinecarboxylic acid, 1-[[4-(1H-indol-3-ylcarbonyl)-1-piperazinyl]carbonyl]-4-oxo-3-(4-piperidinylmethyl)-, (2S,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

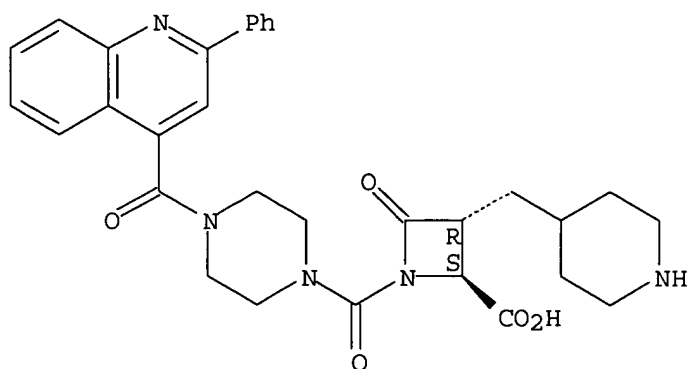


RN 727725-31-7 CAPLUS

CN 2-Azetidinecarboxylic acid, 4-oxo-1-[[4-[(2-phenyl-4-quinolinyl)carbonyl]-1-piperazinyl]carbonyl]-3-(4-piperidinylmethyl)-, (2S,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

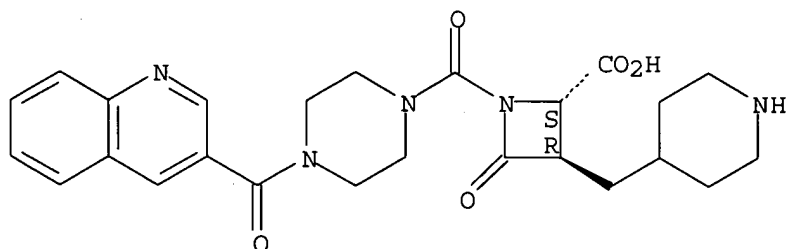
10/622687



RN 727725-32-8 CAPLUS

CN 2-Azetidinecarboxylic acid, 4-oxo-3-(4-piperidinylmethyl)-1-[[4-(3-quinolinylcarbonyl)-1-piperazinyl]carbonyl]-, (2S,3R)- (9CI) (CA INDEX NAME)

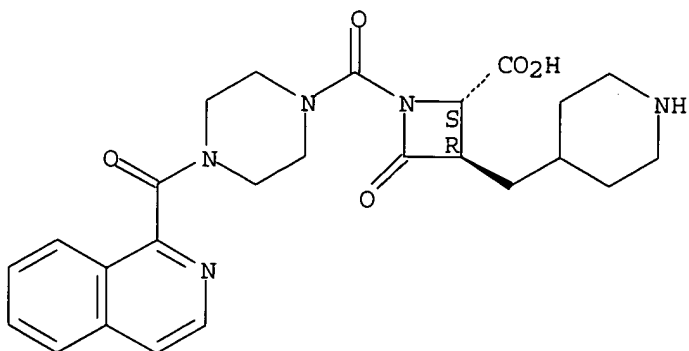
Absolute stereochemistry.



RN 727725-33-9 CAPLUS

CN 2-Azetidinecarboxylic acid, 1-[[4-(1-isoquinolinylcarbonyl)-1-piperazinyl]carbonyl]-4-oxo-3-(4-piperidinylmethyl)-, (2S,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

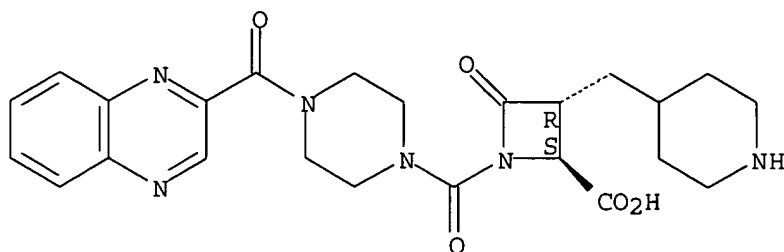


RN 727725-37-3 CAPLUS

CN 2-Azetidinecarboxylic acid, 4-oxo-3-(4-piperidinylmethyl)-1-[[4-(2-quinoxalinylylcarbonyl)-1-piperazinyl]carbonyl]-, (2S,3R)- (9CI) (CA INDEX NAME)

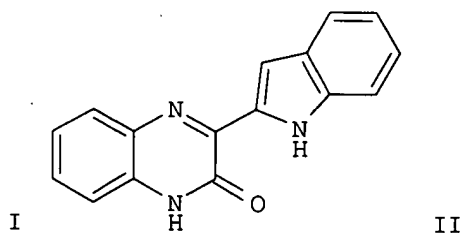
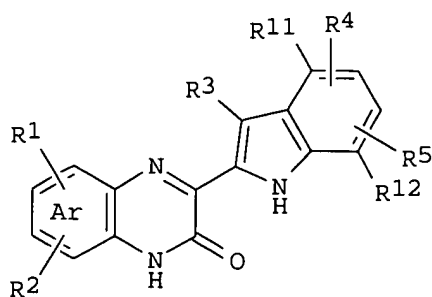
Absolute stereochemistry.

10/622687



L4 ANSWER 2 OF 25 CAPLUS COPYRIGHT 2005 ACS on STN  
AN 2004:430796 CAPLUS  
DN 141:7139  
TI Preparation of indolylquinoxalinones for treating hyperproliferative disorders and diseases associated with angiogenesis  
IN Ladouceur, Gaetan H.; Bear, Brian; Bi, Cheng; Brittelli, David R.; Burke, Michael J.; Chen, Gang; Cook, James; Dumas, Jacques; Sibley, Robert; Turner, Michael R.  
PA Bayer Pharmaceuticals Corporation, USA  
SO PCT Int. Appl., 217 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004043950	A1	20040527	WO 2003-US36003	20031110
	W:				
	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW:				
	BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
PRAI	US 2002-425490P	P	20021112		
	US 2003-460915P	P	20030407		
	US 2003-484202P	P	20030630		
OS	MARPAT 141:7139				
GI					



AB The invention relates to title compds. I [wherein Ar = 6-membered aromatic ring containing 0-2 N atoms; R1 and R2 = independently H, halo, CF3, acyl,

piperidinyl, piperazinyl, morpholinyl, or (un)substituted alkyl, alkoxy, amino, pyrrolidinyl, Ph, etc.; R3 = H, alkyl, OH, NO2, NH2, alkylamino, alkoxyamino, or (un)substituted benzoylamino; R4 = H, OH, halo, CN, acyl, sulfamoyl, trialkylsiloxy, tetrazolyl, thienyl, pyrrolyl, pyrimidinyl, oxazolyl, furanyl, or (un)substituted alkyl, alkenyl, alkynyl, alkoxy, amino, oxadiazolyl, Ph, pyridyl(oxy), carbamoyl; R11 and R12 = independently H, F, or Cl with the proviso that when one of R11 and R12 = F or Cl, the other must be H; and pharmaceutically acceptable salts and esters thereof]. The invention also relates to the use of I and their pharmaceutical compns. for treating hyperproliferative disorders and diseases associated with angiogenesis (no data). Examples include representative syntheses for compds. of the invention, pharmaceutical compns. comprising them, and tumor model assays (no specific data given). For instance, N-Boc-indole was coupled with di-Me oxalate using t-BuLi to give tert-Bu 2-[methoxy(oxo)acetyl]-1H-indole-1-carboxylate (72%). Cyclization of the dione with 1,2-phenylenediamine in AcOH afforded the quinoxalinone II (77%).

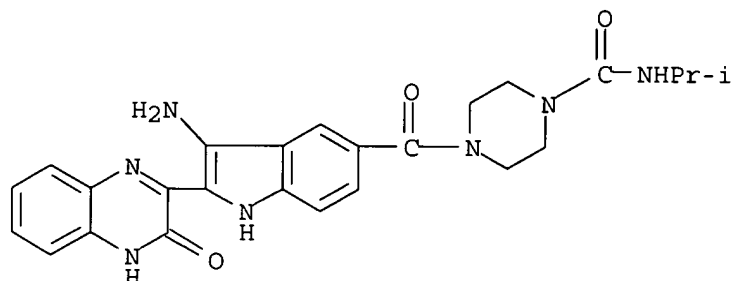
IT 694531-05-0P 694531-27-6P 694531-32-3P  
694531-33-4P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(antiproliferative and angiogenesis inhibitor; preparation of indolylquinoxalinones for treating hyperproliferative disorders and diseases associated with angiogenesis)

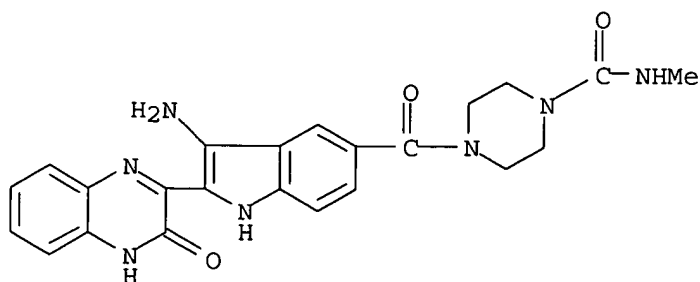
RN 694531-05-0 CAPLUS

CN 1-Piperazinecarboxamide, 4-[[3-amino-2-(3,4-dihydro-3-oxo-2-quinoxaliny)]-1H-indol-5-yl]carbonyl]-N-(1-methylethyl)- (9CI) (CA INDEX NAME)



RN 694531-27-6 CAPLUS

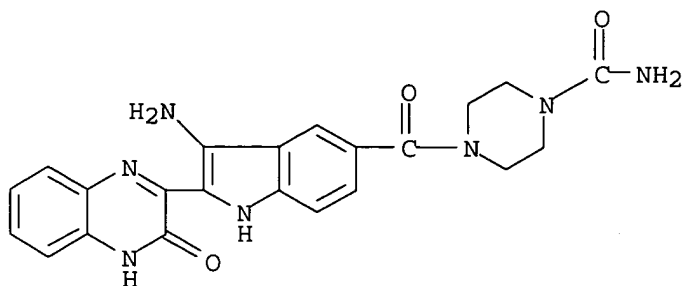
CN 1-Piperazinecarboxamide, 4-[[3-amino-2-(3,4-dihydro-3-oxo-2-quinoxaliny)]-1H-indol-5-yl]carbonyl]-N-methyl- (9CI) (CA INDEX NAME)



RN 694531-32-3 CAPLUS

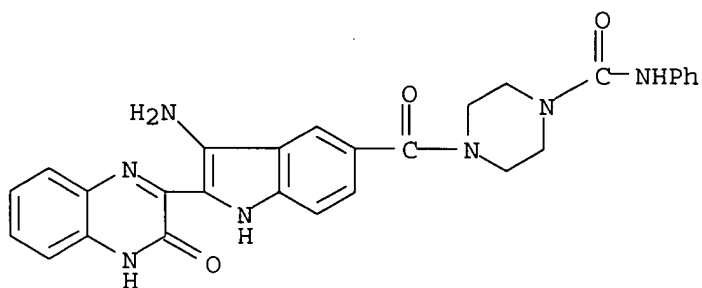
CN 1-Piperazinecarboxamide, 4-[[3-amino-2-(3,4-dihydro-3-oxo-2-quinoxaliny)]-1H-indol-5-yl]carbonyl]- (9CI) (CA INDEX NAME)

10/622687



RN 694531-33-4 CAPLUS

CN 1-Piperazinecarboxamide, 4-[[3-amino-2-(3,4-dihydro-3-oxo-2-quinoxaliny)]-1H-indol-5-yl]carbonyl]-N-phenyl- (9CI) (CA INDEX NAME)



RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 25 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:307614 CAPLUS

DN 140:332509

TI Pharmaceutical compositions containing spiroisoquinolines as  
small-conductance calcium-activated potassium channel (SK channel)  
blockers and acetylcholine esterase inhibitors

IN Takamuro, Iwao; Honma, Koichi; Ishida, Akihiko; Taniguchi, Hiroyuki;  
Onoda, Yuichi

PA Tanabe Seiyaku Co., Ltd., Japan

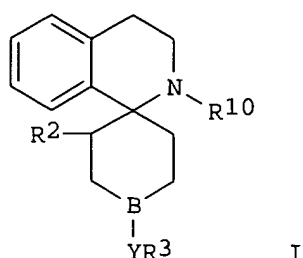
SO Jpn. Kokai Tokkyo Koho, 334 pp.  
CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2004115450	A2	20040415	JP 2002-282311	20020927
PRAI	JP 2002-282311		20020927		
OS	MARPAT 140:332509				
GI					



AB Title compns., useful for treatment of digestive tract function failure, central nervous disorders, myotonic dystrophy, etc., contain spiroisquinolines I [ring A may be substituted; R10 = H, ZR1; R1 = H, (un)substituted lower alkyl, (un)substituted lower alkenyl; Y, Z = CH2, CO; R2 H, (un)substituted heterocyclyl; B = N, CH; R3 = (un)substituted NH2, (un)substituted N-containing aliphatic heterocyclyl] or their pharmacol. acceptable salts as active ingredients. Thus, (1R\*,2R\*(S\*),4R\*)-2'-[3-(methylamino)propionyl]-3',4'-dihydro-6',7'-dimethoxy-2-(2-ethyl-1,2,3,4-tetrahydro-6,7-dimethoxy-1-isoquinolyl)-4-[4-[1-(4-pyridylmethyl)-1H-pyrazolol-[3,4-d]pyrimidin-4-yl]-1-piperazinyl]carbonyl-spiro[cyclohexane-1,1'(2'H)isoquinoline] difumarate inhibited binding of 125I-apamin to SK channel in guinea pigs with IC50 value of 0.05  $\mu$ M.

IT **470428-92-3P 470430-28-5P 470430-69-4P**  
**470431-27-7P 470438-82-5P**

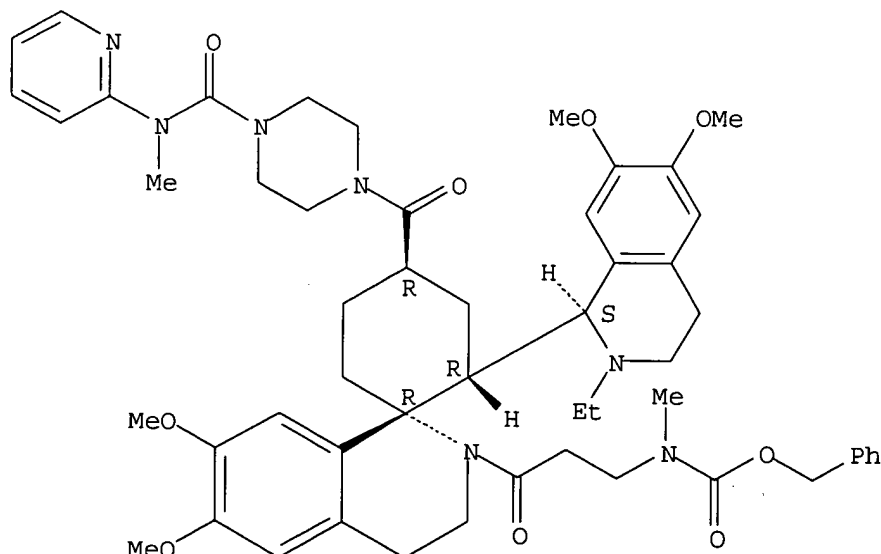
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of spiroisquinolines as small-conductance Ca<sup>2+</sup>-activated K<sup>+</sup> channel blockers and acetylcholine esterase inhibitors for treatment of diseases)

RN 470428-92-3 CAPLUS

CN Carbamic acid, [3-[(1R,2R,4R)-2-[(1S)-2-ethyl-1,2,3,4-tetrahydro-6,7-dimethoxy-1-isoquinolyl]-3',4'-dihydro-6',7'-dimethoxy-4-[4-[(methyl-2-pyridinylamino)carbonyl]-1-piperazinyl]carbonyl]spiro[cyclohexane-1,1'(2'H)-isoquinolin]-2'-yl]-3-oxopropyl]methyl-, phenylmethyl ester, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.





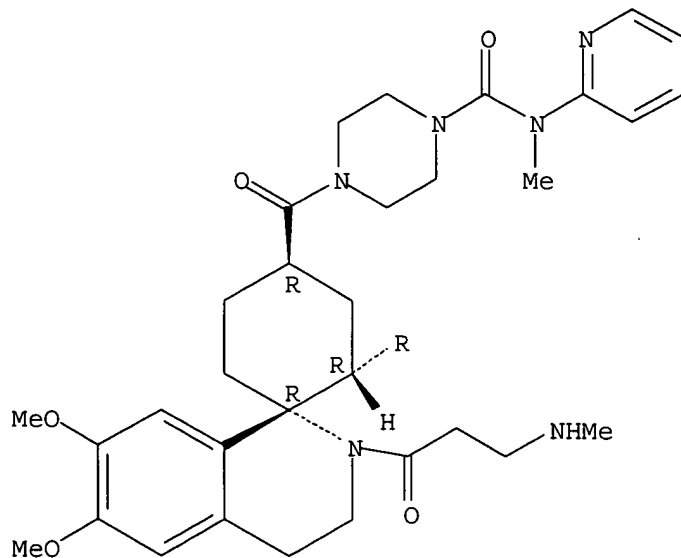
10/622687

RN 470430-28-5 CAPLUS

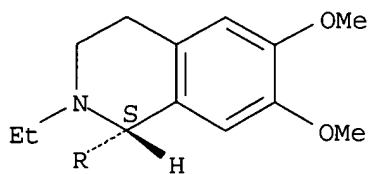
CN 1-Piperazinecarboxamide, 4-[[[(1R,2R,4R)-2-[(1S)-2-ethyl-1,2,3,4-tetrahydro-6,7-dimethoxy-1-isoquinolinyl]-3',4'-dihydro-6',7'-dimethoxy-2'-[3-(methylamino)-1-oxopropyl]spiro[cyclohexane-1,1'(2'H)-isoquinolin]-4-yl]carbonyl]-N-methyl-N-2-pyridinyl-, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

PAGE 1-A



PAGE 2-A

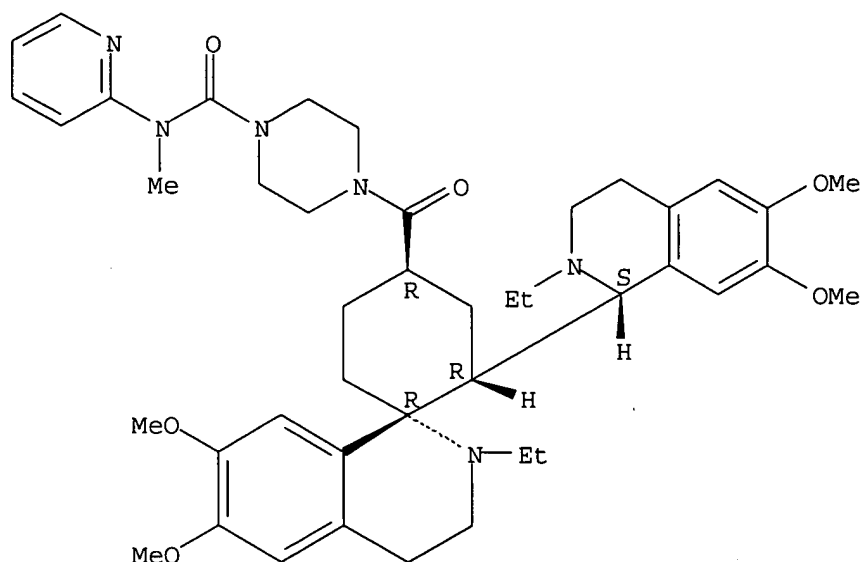


RN 470430-69-4 CAPLUS

CN 1-Piperazinecarboxamide, 4-[[[(1R,2R,4R)-2'-ethyl-2-[(1S)-2-ethyl-1,2,3,4-tetrahydro-6,7-dimethoxy-1-isoquinolinyl]-3',4'-dihydro-6',7'-dimethoxyspiro[cyclohexane-1,1'(2'H)-isoquinolin]-4-yl]carbonyl]-N-methyl-N-2-pyridinyl-, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

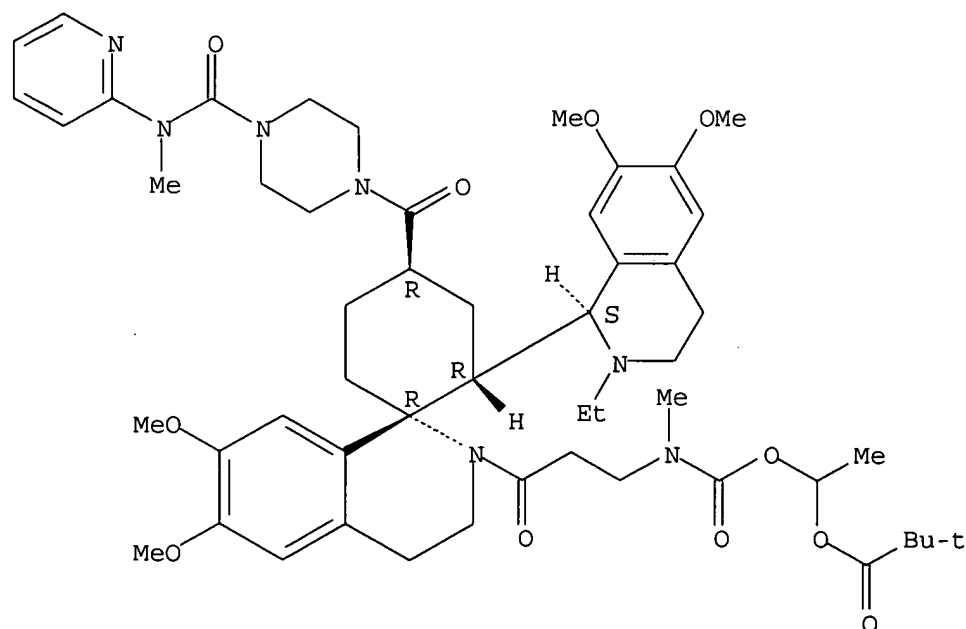
10/622687



RN 470431-27-7 CAPLUS

CN Propanoic acid, 2,2-dimethyl-, 1-[[[3-[(1R,2R,4R)-2-[(1S)-2-ethyl-1,2,3,4-tetrahydro-6,7-dimethoxy-1-isoquinolinyl]-3',4'-dihydro-6',7'-dimethoxy-4-[[4-[(methyl-2-pyridinylamino)carbonyl]-1-piperazinyl]carbonyl]spiro[cyclohexane-1,1'(2'H)-isoquinolin]-2'-yl]-3-oxopropyl]methylamino]carbonyl]oxy]ethyl ester, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 470438-82-5 CAPLUS

CN Propanoic acid, 2,2-dimethyl-, 1-[[[3-[(1R,2R,4R)-2-[(1S)-2-ethyl-1,2,3,4-tetrahydro-6,7-dimethoxy-1-isoquinolinyl]-3',4'-dihydro-6',7'-dimethoxy-4-[[4-[(methyl-2-pyridinylamino)carbonyl]-1-piperazinyl]carbonyl]spiro[cyclohexane-1,1'(2'H)-isoquinolin]-2'-yl]-3-oxopropyl]methylamino]carbonyl]oxy]ethyl ester, rel- (9CI) (CA INDEX NAME)

10/622687

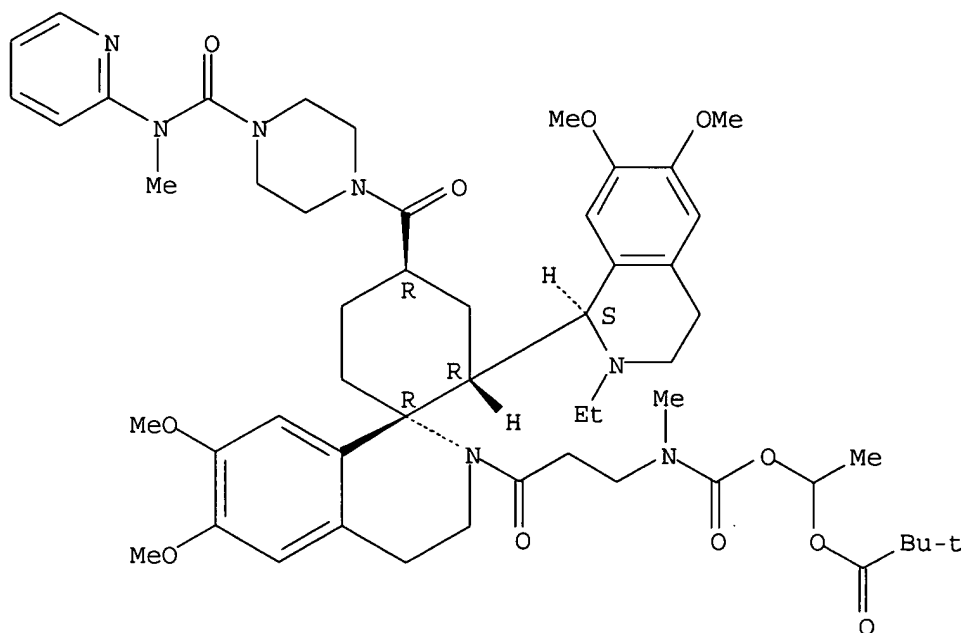
ethyl ester, rel-, (2E)-2-butenedioate (1:2) (9CI) (CA INDEX NAME)

CM 1

CRN 470431-27-7

CMF C53 H73 N7 O11

Relative stereochemistry.

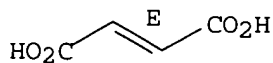


CM 2

CRN 110-17-8

CMF C4 H4 O4

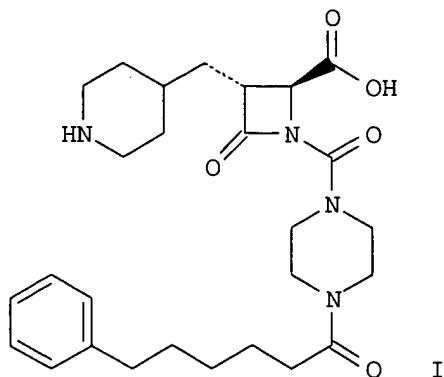
Double bond geometry as shown.



L4 ANSWER 4 OF 25 CAPLUS COPYRIGHT 2005 ACS on STN  
AN 2004:303297 CAPLUS  
DN 141:54096  
TI Solid-phase synthesis and SAR of 4-carboxy-2-azetidinone mechanism-based  
tryptase inhibitors  
AU Sutton, James C.; Bolton, Scott A.; Davis, Malcolm E.; Hartl, Karen S.;  
Jacobson, Bruce; Mathur, Arvind; Ogletree, Martin L.; Slusarchyk, William  
A.; Zahler, Robert; Seiler, Steven M.; Bisacchi, Gregory S.  
CS The Bristol-Myers Squibb Pharmaceutical Research Institute, Princeton, NJ,  
08543-4000, USA  
SO Bioorganic & Medicinal Chemistry Letters (2004), 14(9), 2233-2239  
CODEN: BMCLE8; ISSN: 0960-894X  
PB Elsevier Science B.V.  
DT Journal  
LA English  
OS CASREACT 141:54096

10/622687

GI



AB A series of non-guanidine N1-activated C4-carboxy azetidinone tryptase inhibitors, e.g. I, was prepared by solid-phase methodol. to quickly assess the SAR associated with distal functionality on the N1-activating group. From these studies, potent inhibitors with improved specificity were discovered.

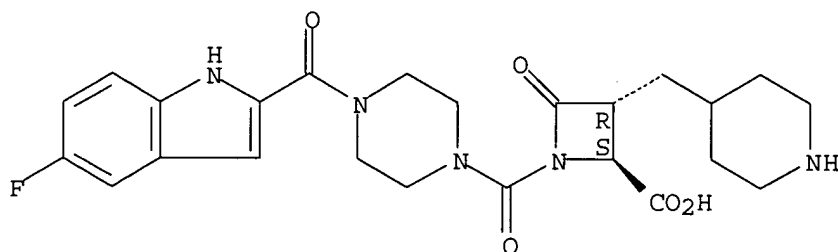
IT **705962-19-2P 705962-20-5P**

RL: SPN (Synthetic preparation); PREP (Preparation)  
(solid-phase synthesis and SAR of 4-carboxy-2-azetidinone  
mechanism-based tryptase inhibitors)

RN 705962-19-2 CAPLUS

CN 2-Azetidinecarboxylic acid, 1-[[4-[(5-fluoro-1H-indol-2-yl)carbonyl]-1-piperazinyl]carbonyl]-4-oxo-3-(4-piperidinylmethyl)-, (2S,3R)- (9CI) (CA INDEX NAME)

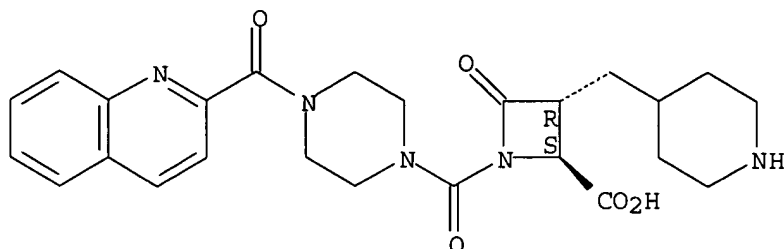
Absolute stereochemistry.



RN 705962-20-5 CAPLUS

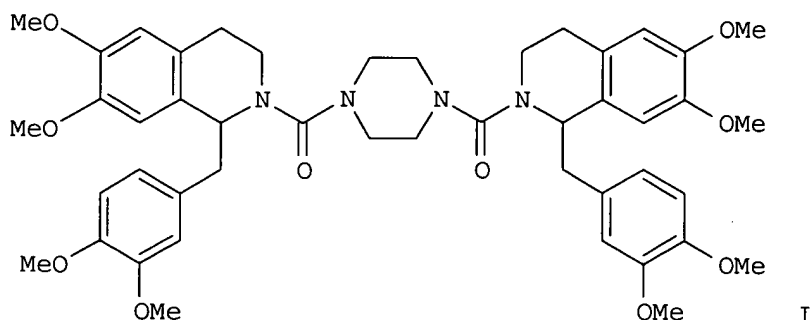
CN 2-Azetidinecarboxylic acid, 4-oxo-3-(4-piperidinylmethyl)-1-[[4-(2-fluorquinolinyl)carbonyl]-1-piperazinyl]carbonyl-, (2S,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 5 OF 25 CAPLUS COPYRIGHT 2005 ACS on STN  
AN 2004:262725 CAPLUS  
DN 140:406722  
TI Synthesis and antispasmodic activity evaluation of bis-(papaverine) analogues  
AU Kaur, Jaskiran; Ghosh, Narendra Nath; Chandra, Ramesh  
CS Department of Chemistry, University of Pennsylvania, Philadelphia, PA, 19104, USA  
SO Chemical & Pharmaceutical Bulletin (2004), 52(3), 316-321  
CODEN: CPBTAL; ISSN: 0009-2363  
PB Pharmaceutical Society of Japan  
DT Journal  
LA English  
GI



I

AB A new series of N-substituted bis-(tetrahydropapaverine) ring systems have been synthesized in expectation of better antispasmodic activity in comparison with papaverine. The synthesis of the targeted heterocycles is described along with a discussion of their structure activity relationship. The general synthetic methods of bis-(tetrahydropapaverine) analogs involve tetrahydropapaverine, various piperazines, diisocyanates and diisothiocyanates as starting materials. Pharmacol. evaluation involves the in vitro antispasmodic activity on a freshly removed guinea pig ileum using a force displacement transducer amplifier connected to a physiograph. Among the analogs synthesized in the present study, N,N'-bis-[2-carbamoyl-1-(3,4-dimethoxybenzyl)-6,7-dimethoxy-1,2,3,4-tetrahydroisoquinolinyl]piperazine (I), was found to be the most potent muscle relaxant (IC<sub>50</sub>: 0.31 μM).

IT 690630-57-0P 690630-58-1P

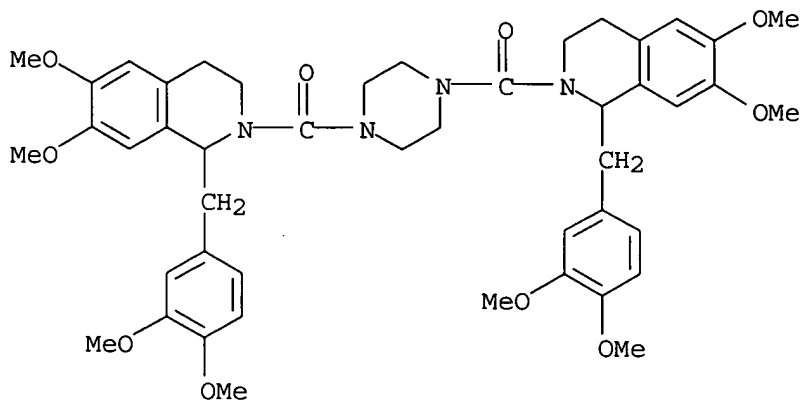
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
(preparation and antispasmodic activity evaluation of bis(papaverine))

10/622687

analogs)

RN 690630-57-0 CAPLUS

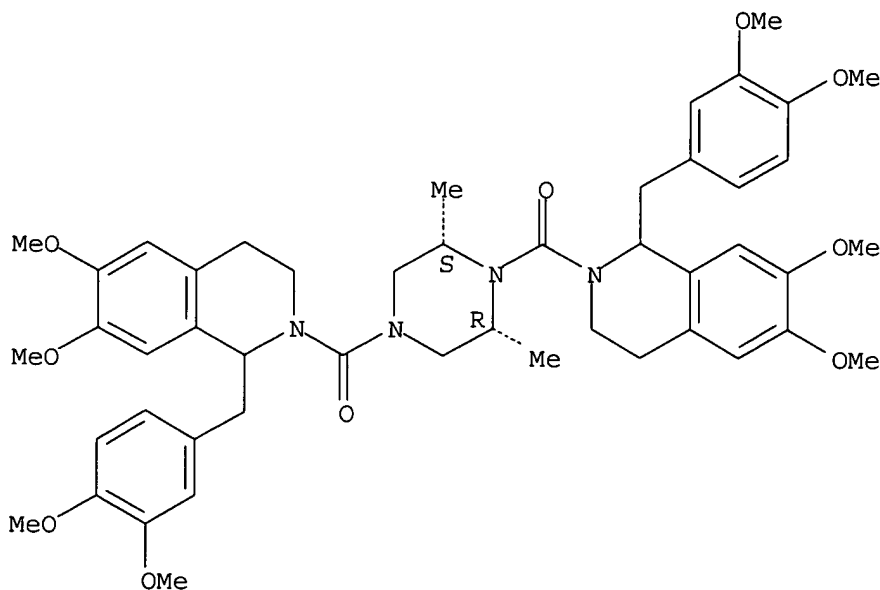
CN Isoquinoline, 2,2'-(1,4-piperazinediyl)dicarbonyl]bis[1-[(3,4-dimethoxyphenyl)methyl]-1,2,3,4-tetrahydro-6,7-dimethoxy- (9CI) (CA INDEX NAME)



RN 690630-58-1 CAPLUS

CN Isoquinoline, 2,2'-[[ (2R,6S)-2,6-dimethyl-1,4-piperazinediyl]dicarbonyl]bis[1-[(3,4-dimethoxyphenyl)methyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RE.CNT 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 6 OF 25 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:101128 CAPLUS

DN 140:146167

TI Preparation of indolyl-, azaindolyl-, and related heterocyclic ureido and thioureido piperazines for treatment of HIV and AIDS

IN Regueiro-Ren, Alicia; Xue, Qiufen May; Kadow, John F.; Taylor, Malcolm

10/622687

PA Bristol-Myers Squibb Company, USA  
SO PCT Int. Appl., 107 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 1

Apps

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004011425	A2	20040205	WO 2003-US22735	20030722
	WO 2004011425	A3	20040624		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	US 2004063746	A1	20040401	US 2003-622687	20030718
PRAI	US 2002-398812P	P	20020725		
OS	MARPAT 140:146167				
GI					

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

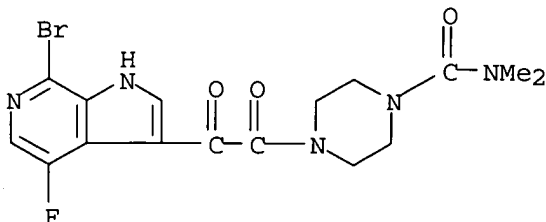
AB The title compds. I [Y = O or S; Z = C or N; A = (substituted)amino; R1 = H, OMe, or halo; R2, R4 = H, halo, cyano, nitro etc.; R3 = H, halo, cyano, nitro, etc, when Z = C; R3 = O or does not exist when Z = N; R5 = H or Me; R6, R7, R8, R9, R10, R11, R12, R13 = H or alkyl] were prepared for treatment of HIV and AIDS. Thus, reaction of 1-(4-fluoro-7-methoxycarbonyl-1H-indol-3-yloxoacetyl)piperazine hydrochloride (preparation given) with dimethylcarbamoyl chloride yielded compound II. The prepared compds. were assayed for inhibition against HIV-1 in HeLa cells and were classified with activity of EC50 < 1  $\mu$ M, 1  $\mu$ M < EC50 < 5  $\mu$ M, or EC50 > 5  $\mu$ M.

IT 652160-66-2P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)  
(preparation of indolyl-, azaindolyl-, and related heterocyclic ureido and thioureido piperazines for treatment of HIV and AIDS)

RN 652160-66-2 CAPLUS

CN 1-Piperazinecarboxamide, 4-[(7-bromo-4-fluoro-1H-pyrrolo[2,3-c]pyridin-3-yl)oxoacetyl]-N,N-dimethyl- (9CI) (CA INDEX NAME)



IT 509072-94-0P 509073-22-7P 652160-57-1P

10/622687

652160-58-2P 652160-60-6P 652160-61-7P

652160-62-8P 652160-63-9P 652160-65-1P

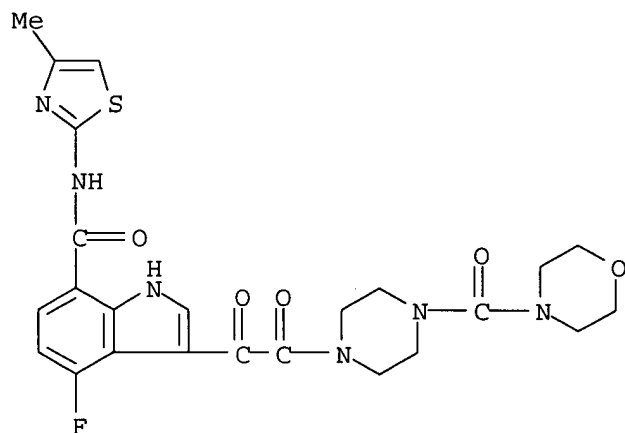
652160-67-3P 652160-68-4P 652160-69-5P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of indolyl-, azaindolyl-, and related heterocyclic ureido and thioureido piperazines for treatment of HIV and AIDS)

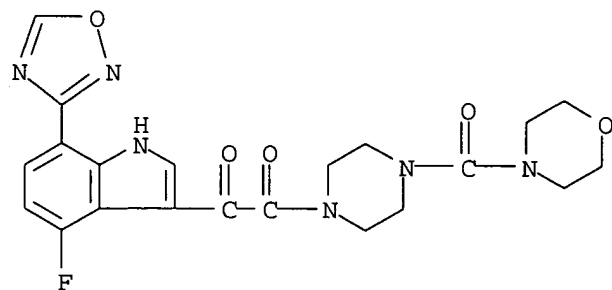
RN 509072-94-0 CAPLUS

CN 1H-Indole-7-carboxamide, 4-fluoro-N-(4-methyl-2-thiazolyl)-3-[[4-(4-morpholinylcarbonyl)-1-piperazinyl]oxoacetyl]- (9CI) (CA INDEX NAME)



RN 509073-22-7 CAPLUS

CN Morpholine, 4-[[4-[[4-fluoro-7-(1,2,4-oxadiazol-3-yl)-1H-indol-3-yl]oxoacetyl]-1-piperazinyl]carbonyl]- (9CI) (CA INDEX NAME)

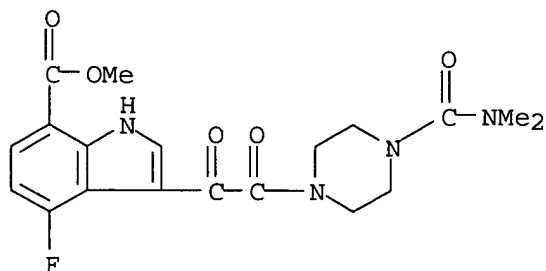


RN 652160-57-1 CAPLUS

CN 1H-Indole-7-carboxylic acid, 3-[[4-[(dimethylamino)carbonyl]-1-piperazinyl]oxoacetyl]-4-fluoro-, methyl ester (9CI) (CA INDEX NAME)

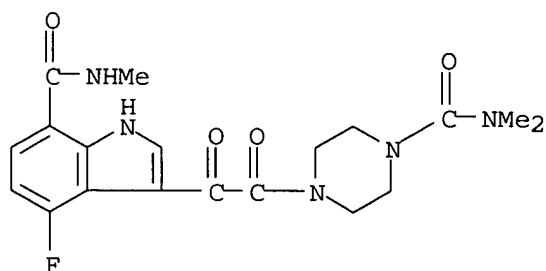


10/622687



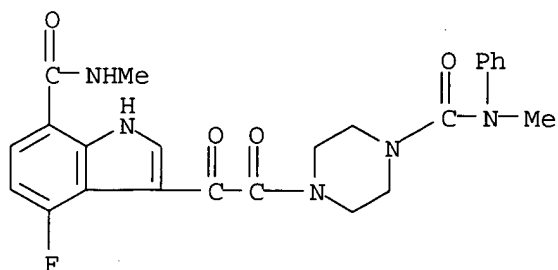
RN 652160-58-2 CAPLUS

CN 1H-Indole-7-carboxamide, 3-[[4-[(dimethylamino)carbonyl]-1-piperazinyl]oxoacetyl]-4-fluoro-N-methyl- (9CI) (CA INDEX NAME)



RN 652160-60-6 CAPLUS

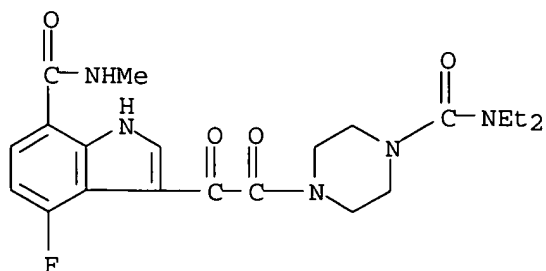
CN 1H-Indole-7-carboxamide, 4-fluoro-N-methyl-3-[[4-[(methylphenylamino)carbonyl]-1-piperazinyl]oxoacetyl]- (9CI) (CA INDEX NAME)



RN 652160-61-7 CAPLUS

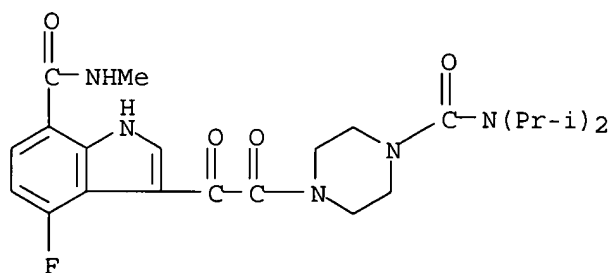
CN 1H-Indole-7-carboxamide, 3-[[4-[(diethylamino)carbonyl]-1-piperazinyl]oxoacetyl]-4-fluoro-N-methyl- (9CI) (CA INDEX NAME)

10/622687



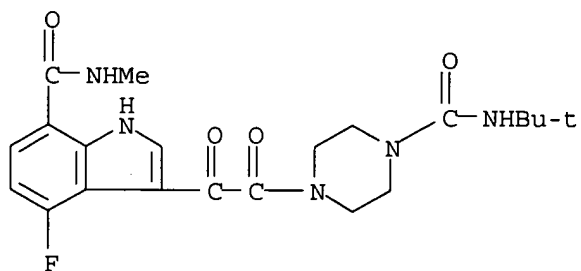
RN 652160-62-8 CAPLUS

CN 1H-Indole-7-carboxamide, 3-[[4-[[bis(1-methylethyl)amino]carbonyl]-1-piperazinyl]oxoacetyl]-4-fluoro-N-methyl- (9CI) (CA INDEX NAME)



RN 652160-63-9 CAPLUS

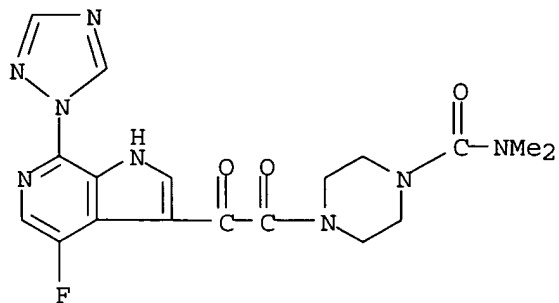
CN 1H-Indole-7-carboxamide, 3-[[4-[[[(1,1-dimethylethyl)amino]carbonyl]-1-piperazinyl]oxoacetyl]-4-fluoro-N-methyl- (9CI) (CA INDEX NAME)



RN 652160-65-1 CAPLUS

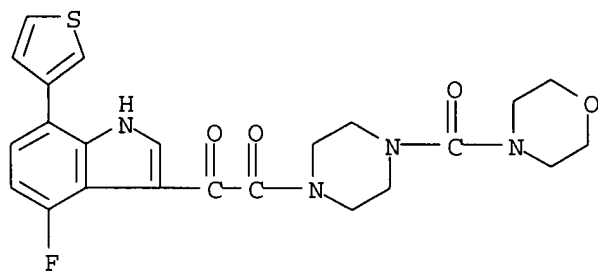
CN 1-Piperazinecarboxamide, 4-[[4-fluoro-7-(1H-1,2,4-triazol-1-yl)-1H-pyrrolo[2,3-c]pyridin-3-yl]oxoacetyl]-N,N-dimethyl- (9CI) (CA INDEX NAME)

10/622687



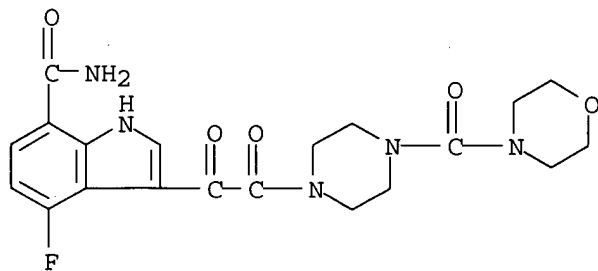
RN 652160-67-3 CAPLUS

CN Morpholine, 4-[[4-[[4-fluoro-7-(3-thienyl)-1H-indol-3-yl]oxoacetyl]-1-piperazinyl]carbonyl]- (9CI) (CA INDEX NAME)



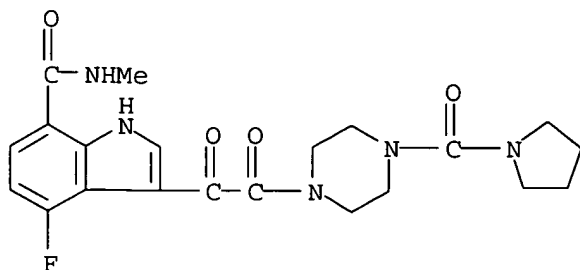
RN 652160-68-4 CAPLUS

CN 1H-Indole-7-carboxamide, 4-fluoro-3-[[4-(4-morpholinylcarbonyl)-1-piperazinyl]oxoacetyl]- (9CI) (CA INDEX NAME)



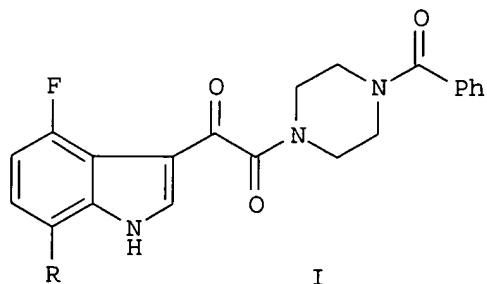
RN 652160-69-5 CAPLUS

CN 1H-Indole-7-carboxamide, 4-fluoro-N-methyl-3-[oxo[4-(1-pyrrolidinylcarbonyl)-1-piperazinyl]acetyl]- (9CI) (CA INDEX NAME)



L4 ANSWER 7 OF 25 CAPLUS COPYRIGHT 2005 ACS on STN  
 AN 2003:282118 CAPLUS  
 DN 138:304300  
 TI Preparation and antiviral activity of substituted  
 piperazinyloxoacetylindole derivatives  
 IN Wallace, Owen B.; Wang, Tao; Yeung, Kap-Sun; Pearce, Bradley C.; Meanwell,  
 Nicholas A.; Qiu, Zhilei; Fang, Haiquan; Xue, Qiufen May; Yin, Zhiwei  
 PA USA  
 SO U.S. Pat. Appl. Publ., 182 pp., Cont.-in-part of U.S. Ser. No. 888,686.  
 CODEN: USXXCO  
 DT Patent  
 LA English  
 FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2003069245	A1	20030410	US 2001-27612	20011219
	US 6573262	B2	20030603		
PRAI	US 2000-217444P	P	20000710		
	US 2001-265978P	P	20010202		
	US 2001-888686	A2	20010625		
OS	MARPAT 138:304300				
GI					



I

AB Piperazinyloxoacetylindole derivs., e.g. I (R = Ph), were prepared and tested as human antiviral agents, specifically to be used for treating HIV and AIDS. Thus, bromoindole I (R = Br) (II) reacted with tri-n-butylphenyltin to give I (R = Ph). Furthermore, II was prepared by reacting 2-bromo-5-fluoronitrobenzene with vinylmagnesium bromide, which gave 4-fluoro-7-bromoindole. The latter compound was then added to Et chlorooxoacetate to give the acylated adduct which was hydrolyzed to the acid and aminated with N-benzoylpiperazine. Testing of these compds. indicated that they possess unique antiviral activity; and they are proposed to be used alone or in combination with other antivirals, anti-infectives, immunomodulators or HIV entry inhibitors.

10/622687

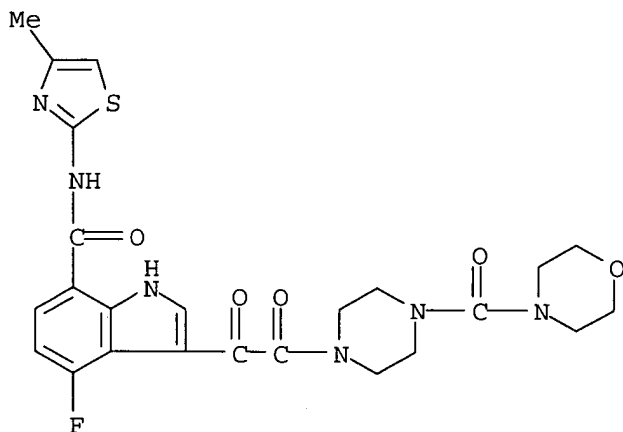
IT 509072-94-0P 509073-13-6P 509073-22-7P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of piperazinyloxoacetylindole derivs. and their use as human antiviral, antiinfective, anti-HIV, anti-AIDS, and immunomodulator agents)

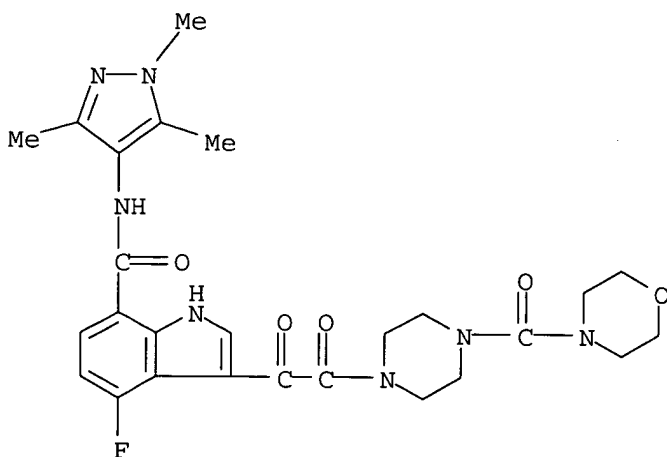
RN 509072-94-0 CAPLUS

CN 1H-Indole-7-carboxamide, 4-fluoro-N-(4-methyl-2-thiazolyl)-3-[[4-(4-morpholinylcarbonyl)-1-piperazinyl]oxoacetyl]- (9CI) (CA INDEX NAME)



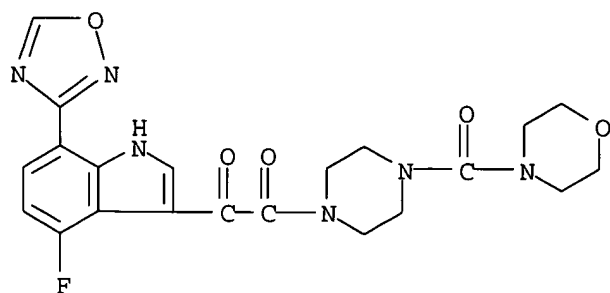
RN 509073-13-6 CAPLUS

CN 1H-Indole-7-carboxamide, 4-fluoro-3-[[4-(4-morpholinylcarbonyl)-1-piperazinyl]oxoacetyl]-N-(1,3,5-trimethyl-1H-pyrazol-4-yl)- (9CI) (CA INDEX NAME)



RN 509073-22-7 CAPLUS

CN Morpholine, 4-[[4-[[4-fluoro-7-(1,2,4-oxadiazol-3-yl)-1H-indol-3-yl]oxoacetyl]-1-piperazinyl]carbonyl]- (9CI) (CA INDEX NAME)



L4 ANSWER 8 OF 25 CAPLUS COPYRIGHT 2005 ACS on STN  
 AN 2002:777925 CAPLUS  
 DN 137:294881  
 TI A spiroisoquinoline compound, useful as an SK channel blocker and  
 acetylcholinesterase inhibitor, for treatment of, e.g., constipation, a  
 method for preparing the same, and an intermediate thereof  
 IN Takamuro, Iwao; Homma, Koichi; Ishida, Akihiko; Taniguchi, Hiroyuki;  
 Onoda, Yuichi  
 PA Tanabe Seiyaku Co., Ltd., Japan  
 SO PCT Int. Appl., 464 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002079189	A2	20021010	WO 2002-JP3051	20020328
	WO 2002079189	A3	20030703		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	JP 2003252871	A2	20030910	JP 2002-92220	20020328
	EP 1373247	A2	20040102	EP 2002-708702	20020328
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			
	US 2004106635	A1	20040603	US 2003-473064	20030926
PRAI	JP 2001-94710	A	20010329		
	JP 2001-189010	A	20010622		
	JP 2001-326866	A	20011024		
	WO 2002-JP3051	W	20020328		
OS	MARPAT 137:294881				
GI					

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB The invention provides a novel spiroisoquinoline derivative, which has a small-conductance potassium channel (SK) blocking activity and is useful as a medicament, a method for preparing the same, and an intermediate

thereof. Specifically, the invention provides spirocyclic compds. I and their pharmaceutically acceptable salts [wherein: the benzo ring of the isoquinoline subunit is optionally substituted; R1 = H or -ZR; R = H, optionally substituted lower alkyl, or optionally substituted lower alkenyl; Z = CH2 or CO; R2 = H or optionally substituted heterocyclic group; X = N or CH; R3 = optionally substituted amino or N-containing aliphatic heterocyclic group; Y = CH2 or CO]. The compds. are useful for prophylaxis or treatment of conditions treatable with SK channel blockers, including constipation, irritable bowel syndrome, gastroesophageal reflux disease, and post-operative ileus. They are also useful for treatment of conditions responsive to compds. with both SK channel-blocking and acetylcholinesterase-inhibiting activities, such as gastrointestinal motility disorders, CNS disorders, memory and learning disorders (including Alzheimer's disease), emotional disorders, myotonic muscular dystrophy, and sleep apnea. Over 900 specific examples of I are given. For instance, di-Et malonate was bis-alkylated with tert-Bu acrylate and partially hydrolyzed, giving 4,4-bis(ethoxycarbonyl)pimelic acid. This was bis-amidated with 2 equiv of homoveratrylamine, and the diamide was bis-cyclized using POCl3 to give spirocyclic intermediate II. The latter was converted in 7 steps to acid III, which was condensed with 2-amino-4-(piperazin-1-yl)pyridine to give title compound IV. Selected compds. I inhibited 125I-apamine binding to guinea pig colon membrane cells with IC50 values of 0.004 to 0.06  $\mu$ M. Other compds. I inhibited acetylcholinesterase in vitro with IC50 values of 0.00008 to 0.06  $\mu$ M. The oral ED of selected I for promoting evacuation in guinea pigs was 0.1 to 1 mg/kg.

IT **470428-92-3P 470430-28-5P 470430-69-4P**  
**470431-27-7P 470438-82-5P**

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

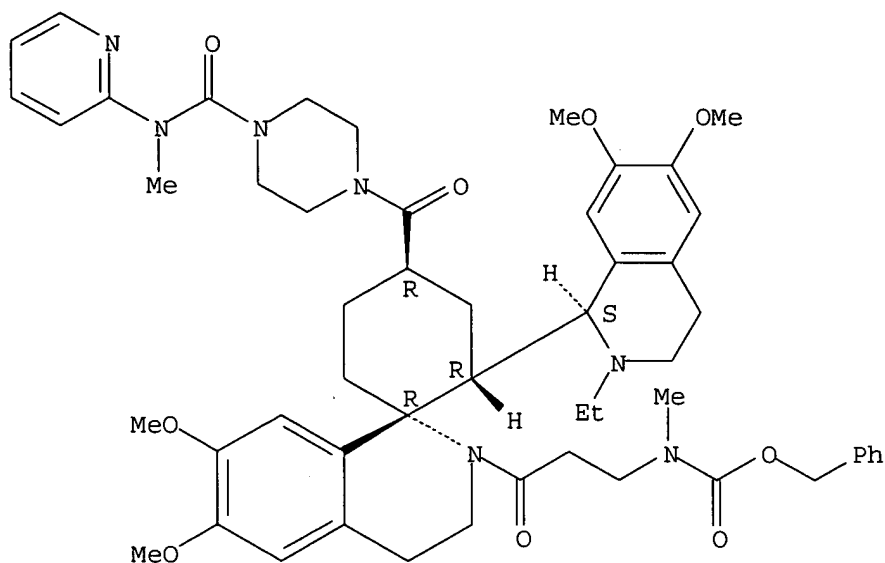
(drug candidate; preparation of spiroisoquinoline compds. as SK channel blockers and acetylcholinesterase inhibitors for treatment of constipation)

RN 470428-92-3 CAPLUS

CN Carbamic acid, [3-[(1R,2R,4R)-2-[(1S)-2-ethyl-1,2,3,4-tetrahydro-6,7-dimethoxy-1-isoquinolinyl]-3',4'-dihydro-6',7'-dimethoxy-4-[[4-[(methyl-2-pyridinylamino)carbonyl]-1-piperazinyl]carbonyl]spiro[cyclohexane-1,1'(2'H)-isoquinolin]-2'-yl]-3-oxopropyl]methyl-, phenylmethyl ester, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

10/622687

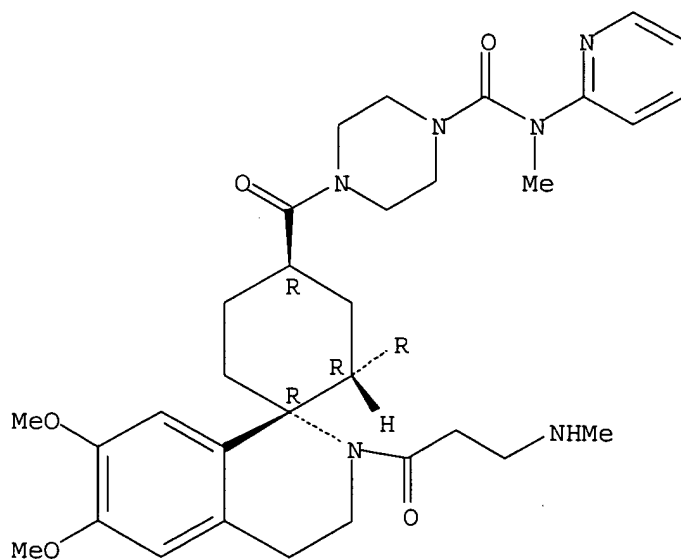


RN 470430-28-5 CAPLUS

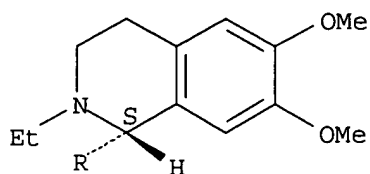
CN 1-Piperazinecarboxamide, 4-[[[(1R,2R,4R)-2-[(1S)-2-ethyl-1,2,3,4-tetrahydro-6,7-dimethoxy-1-isoquinolinyl]-3',4'-dihydro-6',7'-dimethoxy-2'-[3-(methylamino)-1-oxopropyl]spiro[cyclohexane-1,1'(2'H)-isoquinolin]-4-yl]carbonyl]-N-methyl-N-2-pyridinyl-, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

PAGE 1-A



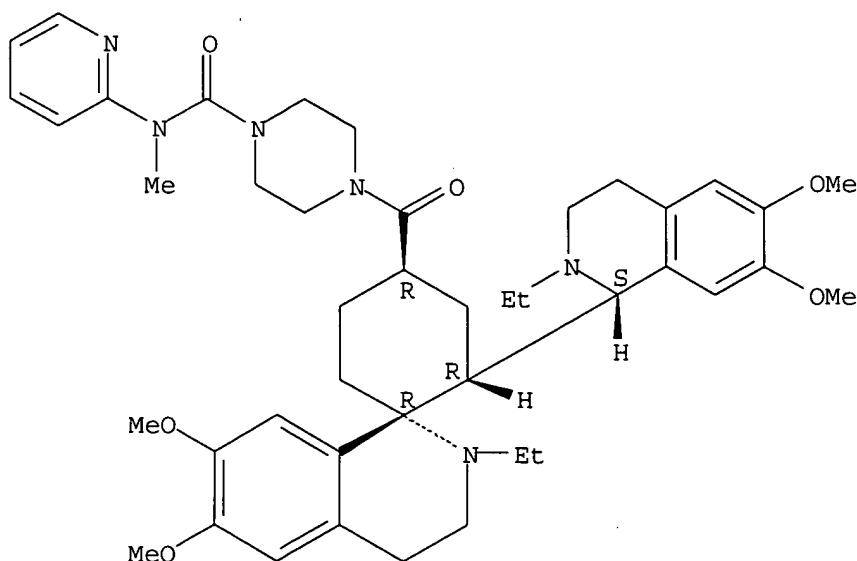




RN 470430-69-4 CAPLUS

CN 1-Piperazinecarboxamide, 4-[[[(1R,2R,4R)-2'-ethyl-2-[(1S)-2-ethyl-1,2,3,4-tetrahydro-6,7-dimethoxy-1-isoquinolinyl]-3',4'-dihydro-6',7'-dimethoxyspiro[cyclohexane-1,1'(2'H)-isoquinolin]-4-yl]carbonyl]-N-methyl-N-2-pyridinyl-, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

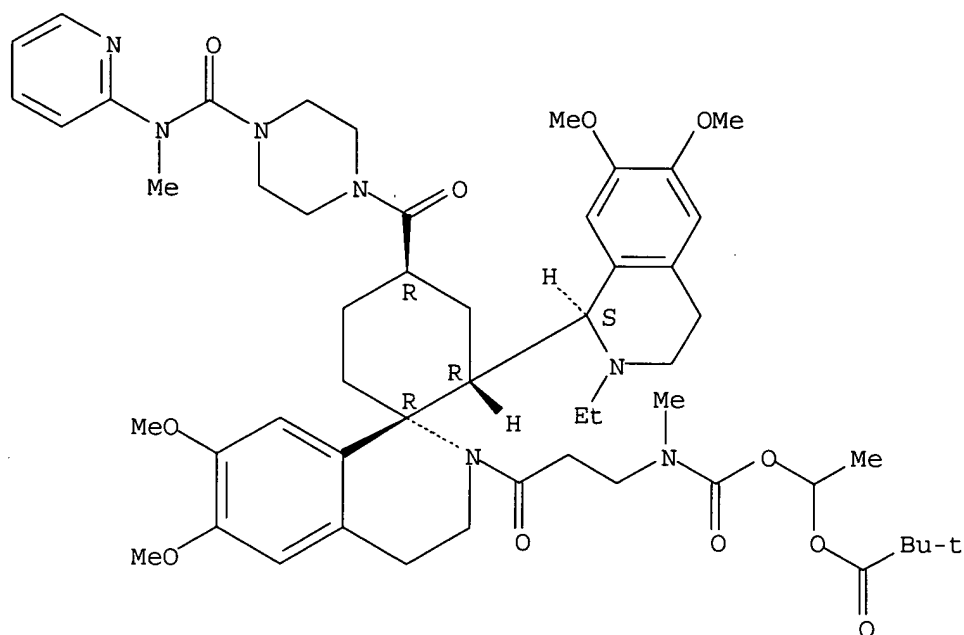


RN 470431-27-7 CAPLUS

CN Propanoic acid, 2,2-dimethyl-, 1-[[[3-[(1R,2R,4R)-2-[(1S)-2-ethyl-1,2,3,4-tetrahydro-6,7-dimethoxy-1-isoquinolinyl]-3',4'-dihydro-6',7'-dimethoxy-4-[[4-[(methyl-2-pyridinylamino)carbonyl]-1-piperazinyl]carbonyl]spiro[cyclohexane-1,1'(2'H)-isoquinolin]-2'-yl]-3-oxopropyl]methylamino]carbonyl]oxy]ethyl ester, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

10/622687



RN 470438-82-5 CAPLUS

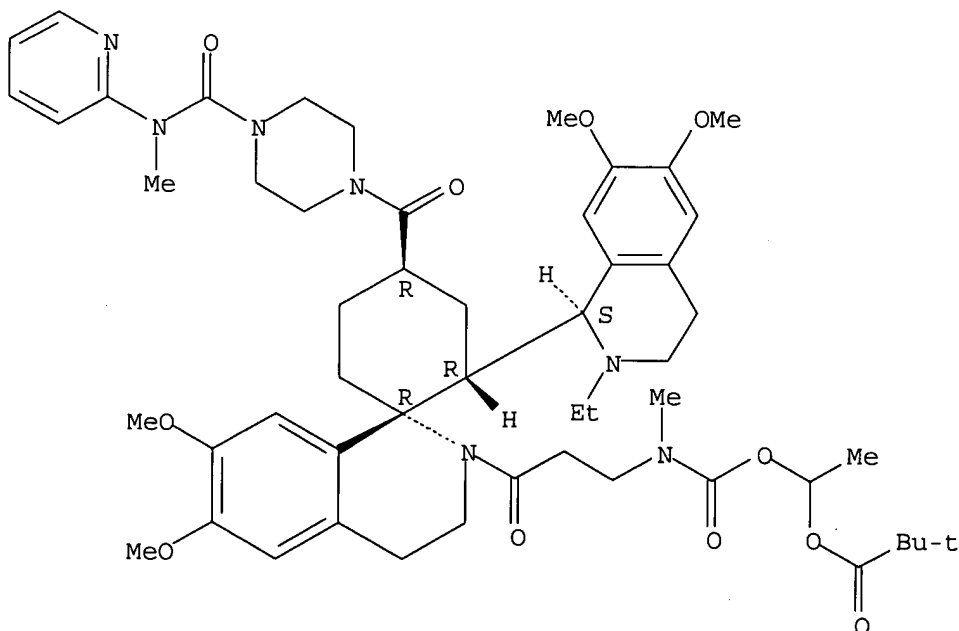
CN Propanoic acid, 2,2-dimethyl-, 1-[[[3-[[1R,2R,4R)-2-[[1S)-2-ethyl-1,2,3,4-tetrahydro-6,7-dimethoxy-1-isoquinolinyl]-3',4'-dihydro-6',7'-dimethoxy-4-[[4-[(methyl-2-pyridinylamino)carbonyl]-1-piperazinyl]carbonyl]spiro[cyclohexane-1,1'(2'H)-isoquinolin]-2'-yl]-3-oxopropyl]methylamino]carbonyl]oxy]ethyl ester, rel-, (2E)-2-butenedioate (1:2) (9CI) (CA INDEX NAME)

CM 1

CRN 470431-27-7

CMF C53 H73 N7 O11

Relative stereochemistry.



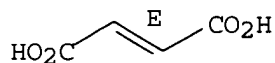
10/622687

CM 2

CRN 110-17-8

CMF C4 H4 O4

Double bond geometry as shown.



L4 ANSWER 9 OF 25 CAPLUS COPYRIGHT 2005 ACS on STN  
AN 2002:312037 CAPLUS  
DN 136:325436  
TI Preparation of quinolinyllindoles as antimicrobial agents  
IN Cuny, Gregory D.; Hauske, James R.; Hoemann, Michael Z.; Chopra, Ian  
PA Sepracor Inc., USA  
SO U.S., 167 pp., Cont. of U.S. Ser. No. 639,622.  
CODEN: USXXAM  
DT Patent  
LA English  
FAN.CNT 7

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6376670	B1	20020423	US 2000-658690	20000908
	US 6207679	B1	20010327	US 1998-45051	19980319
	US 6172084	B1	20010109	US 1998-99640	19980618
	US 6103905	A	20000815	US 1998-213385	19981211
PRAI	US 1997-878781	B2	19970619		
	US 1998-45051	A2	19980319		
	US 1998-99640	A2	19980618		
	US 1998-213385	A1	19981211		
	US 2000-639622	A2	20000815		
OS	MARPAT 136:325436				
GI					

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB The title compds. [I; Z = CO, CR2; R = H, alkyl; R5-R8, R14-R17 = H, halo, alkyl, etc.; R9, R10 = H, alkyl, cycloalkyl, etc.; R3 = H, alkyl; R11 = H, alkyl; R12 = H, alkyl] which are bactericidal to a Gram-pos. bacterium via a non-lytic mechanism at its MIC (data given), were prepared E.g., a multi-step synthesis of II, was given.

IT **218463-50-4P 218463-51-5P 218463-52-6P**  
**218463-53-7P 218463-54-8P 218463-55-9P**  
**218463-56-0P**

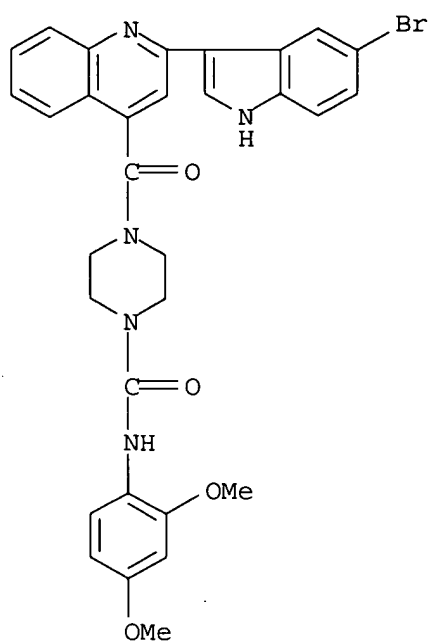
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)

(preparation of quinolinyllindole derivs. as antimicrobial agents)

RN 218463-50-4 CAPLUS

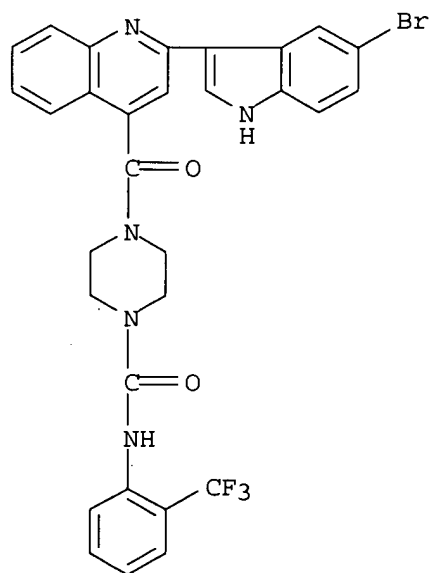
CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyll]carbonyl]-N-(2,4-dimethoxyphenyl)- (9CI) (CA INDEX NAME)

10/622687



RN 218463-51-5 CAPLUS

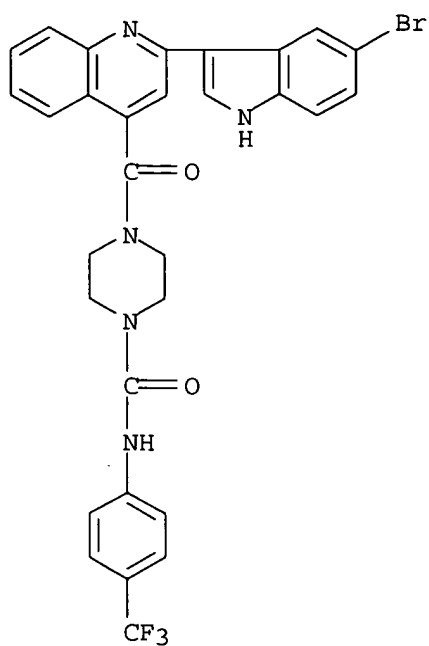
CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[2-(trifluoromethyl)phenyl]-(9CI) (CA INDEX NAME)



RN 218463-52-6 CAPLUS

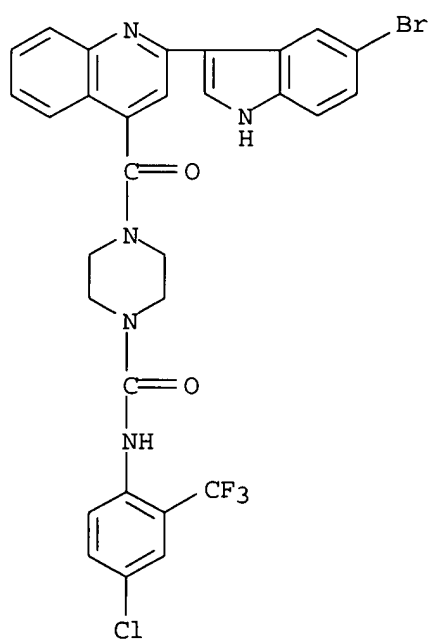
CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[4-(trifluoromethyl)phenyl]-(9CI) (CA INDEX NAME)

10/622687



RN 218463-53-7 CAPLUS

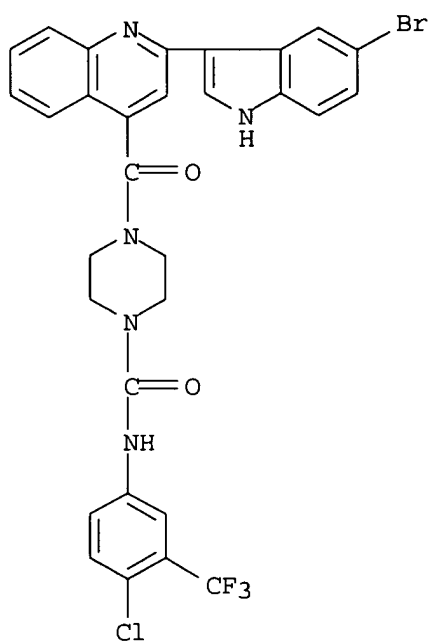
CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[4-chloro-2-(trifluoromethyl)phenyl]-(9CI) (CA INDEX NAME)



RN 218463-54-8 CAPLUS

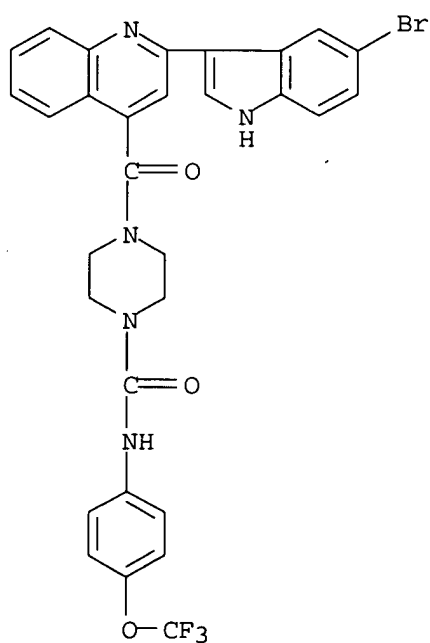
CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[4-chloro-3-(trifluoromethyl)phenyl]-(9CI) (CA INDEX NAME)

10/622687



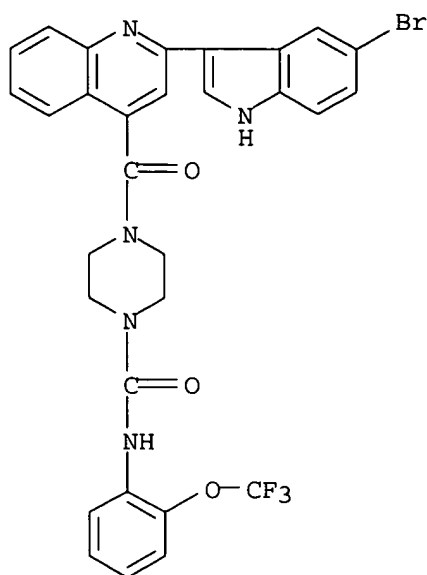
RN 218463-55-9 CAPLUS

CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[4-(trifluoromethoxy)phenyl]- (9CI) (CA INDEX NAME)



RN 218463-56-0 CAPLUS

CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[2-(trifluoromethoxy)phenyl]- (9CI) (CA INDEX NAME)



RE.CNT 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 10 OF 25 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2001:265411 CAPLUS

DN 134:295840

TI Preparation of indolylpropanoyltetrahydroquinoline derivatives which inhibit binding of somatostatin receptors

IN Kato, Kaneyoshi; Terauchi, Jun; Suzuki, Nobuhiro; Takekawa, Shiro

PA Tadeka Chemical Industries, Ltd., Japan

SO PCT Int. Appl., 220 pp.

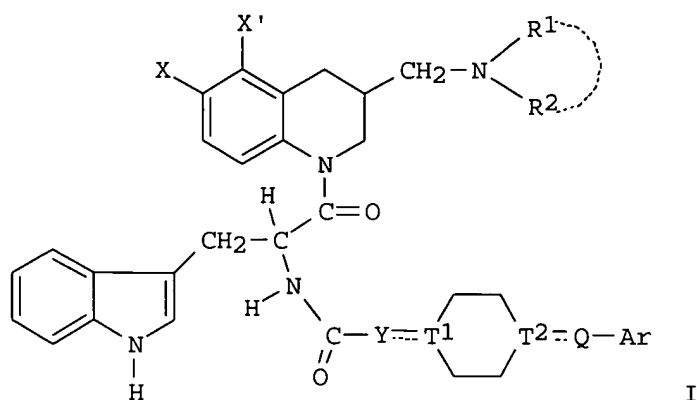
CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001025228	A1	20010412	WO 2000-JP6937	20001005
	W: AE, AG, AL, AM, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CN, CR, CU, CZ, DM, DZ, EE, GD, GE, HR, HU, ID, IL, IN, IS, JP, KG, KR, KZ, LC, LK, LR, LT, LV, MA, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TJ, TM, TR, TT, UA, US, UZ, VN, YU, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	CA 2386517	AA	20010412	CA 2000-2386517	20001005
	AU 2000075568	A5	20010510	AU 2000-75568	20001005
	JP 2002088079	A2	20020327	JP 2000-311723	20001005
	EP 1227090	A1	20020731	EP 2000-964676	20001005
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
PRAI	JP 1999-286939	A	19991007		
	JP 2000-215837	A	20000711		
	WO 2000-JP6937	W	20001005		
OS	MARPAT 134:295840				
GI					



AB The title compds. I [X and X' are the same or different and each represents hydrogen, fluorine, etc., provided that at least one of X and X' represents fluorine, chlorine, etc.; R1 and R2 represents each hydrogen or optionally substituted C1-6 alkyl, or R1 and R2 form together with the nitrogen atom adjacent thereto an optionally substituted nitrogen-containing heterocycle; Y and Q are the same or different and each represents a bond or a spacer having 1 to 6 atoms in the main chain; the dotted line represents a single or double bond; T1 and T2 represent each C(R9) (wherein R9 represents hydrogen, hydroxy, etc.), N, etc.; and Ar represents an optionally substituted aromatic group, hydrogen, etc.; a provision is given] are prepared In an in vitro test for inhibition of binding to the somatostatin receptor type 2, several compds. of this invention showed IC50 of 0.6 to 2 nM. Formulations are given.

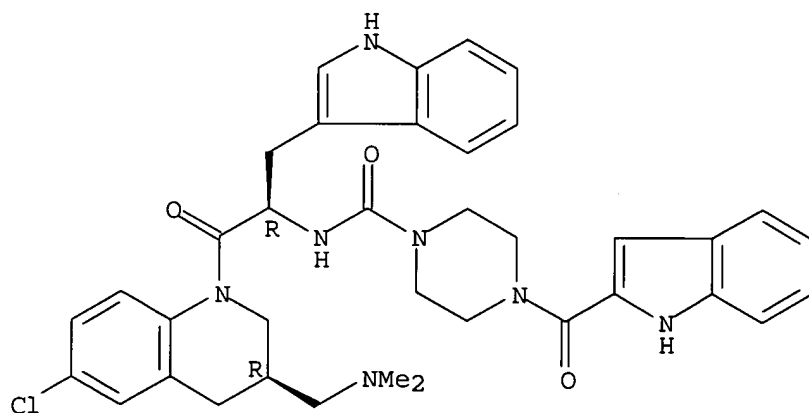
IT **333953-87-0P 333953-88-1P**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of indolylpropanoyltetrahydroquinoline derivs. which inhibit binding of somatostatin receptors)

RN 333953-87-0 CAPLUS

CN 1-Piperazinecarboxamide, N-[(1R)-2-[(3R)-6-chloro-3-[(dimethylamino)methyl]-3,4-dihydro-1(2H)-quinolinyl]-1-(1H-indol-3-ylmethyl)-2-oxoethyl]-4-(1H-indol-2-ylcarbonyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 333953-88-1 CAPLUS

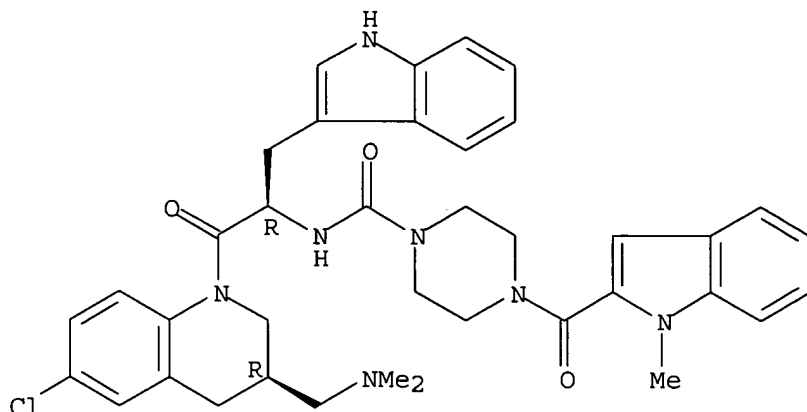
CN 1-Piperazinecarboxamide, N-[(1R)-2-[(3R)-6-chloro-3-



10/622687

[(dimethylamino)methyl]-3,4-dihydro-1(2H)-quinolinyl]-1-(1H-indol-3-ylmethyl)-2-oxoethyl]-4-[(1-methyl-1H-indol-2-yl)carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



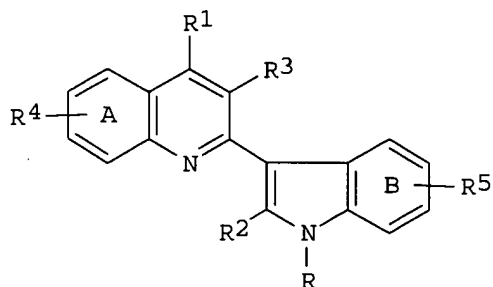
RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 11 OF 25 CAPLUS COPYRIGHT 2005 ACS on STN  
AN 2001:222008 CAPLUS  
DN 134:252257  
TI Preparation of 2-(indolin-3-yl)quinoline derivatives and compositions in  
use as antimicrobial agents  
IN Cuny, Gregory D.; Hauske, James R.; Heefner, Donald L.; Hoemann, Michael  
Z.; Kumaravel, Gnanasambandam; Melikian-Badalian, Anita; Rossi, Richard F.  
PA Sepracor, Inc., USA  
SO U.S., 112 pp., Cont.-in-part of U.S. Ser. No. 878,781, abandoned.  
CODEN: USXXAM  
DT Patent  
LA English  
FAN.CNT 7

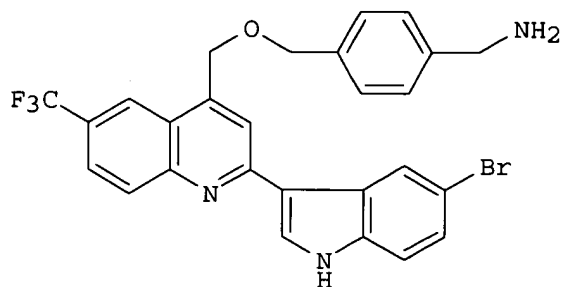
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6207679	B1	20010327	US 1998-45051	19980319
	CA 2293418	AA	19981223	CA 1998-2293418	19980618
	WO 9857931	A2	19981223	WO 1998-US12762	19980618
	WO 9857931	A3	19990429		
	W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, BM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	EP 991623	A2	20000412	EP 1998-930396	19980618
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	US 6172084	B1	20010109	US 1998-99640	19980618
	JP 2002505689	T2	20020219	JP 1999-504835	19980618
	AU 757059	B2	20030130	AU 1998-79797	19980618
	US 6103905	A	20000815	US 1998-213385	19981211
	NO 9906269	A	20000216	NO 1999-6269	19991217
	US 6376670	B1	20020423	US 2000-658690	20000908

10/622687

PRAI	US 1997-878781	B2	19970619
	US 1998-45051	A	19980319
	US 1998-99640	A2	19980618
	WO 1998-US12762	W	19980618
	US 1998-213385	A1	19981211
	US 2000-639622	A2	20000815
OS	MARPAT 134:252257		
GI			



I



II

AB Title compds. I [wherein; R, R<sup>1</sup>, R<sup>2</sup> and R<sup>3</sup> are H, halo, alk(en)(yn)yl, OH, alkoxy, amino, nitro, SH, imine, amide, CO, -(CH<sub>2</sub>)<sub>0-8</sub>-R<sub>80</sub>, etc.; R<sup>4</sup> is the same as R-R<sup>3</sup> but not H; R<sup>5</sup> is the same as R<sup>4</sup> except that at least 1(-8) CH<sub>2</sub> precede R<sub>80</sub>; A is (un)substituted with any number of R<sup>4</sup> up to the number limited by stability and rules of valence; B is substituted with at least one instance of R<sup>5</sup> up to the number limited by stability and rules of valence; R<sub>80</sub> is (substituted) aryl, cycloalk(en)yl, heterocyclyl or polycyclyl.] and related quinoline derivs. are prepared as antimicrobial agents. For instance, synthesis of II is accomplished by alkylation of 4-hydroxymethyl-6-trifluoromethyl-2-(N-t-butoxycarbonylindol-3-yl)quinoline with (4-t-butoxycarbonylaminomethyl)benzyl iodide followed by deprotection. There are 282 examples of I provided. The min. inhibitory concentration (MIC) of I against at least one Gram-pos. bacterium is 0.1-10 µg/mL. Certain compds. of formula I have a therapeutic index in primates of at least 10 for the inhibition of infection by at least one Gram-pos. bacterium.

IT **218463-50-4P 218463-51-5P 218463-52-6P**  
**218463-53-7P 218463-54-8P 218463-55-9P**  
**218463-56-0P**

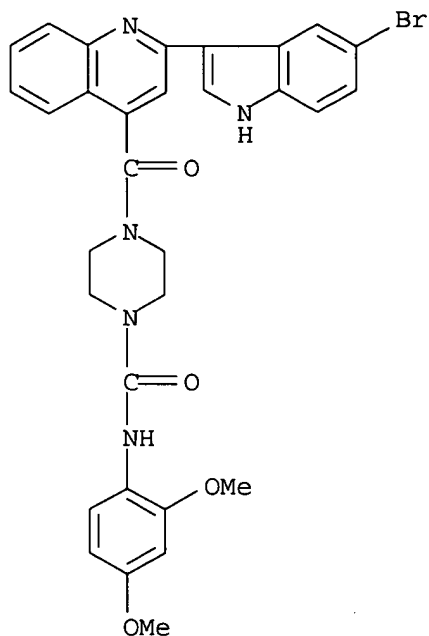
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation and use of quinolinyndole derivs. as antimicrobial agents)

10/622687

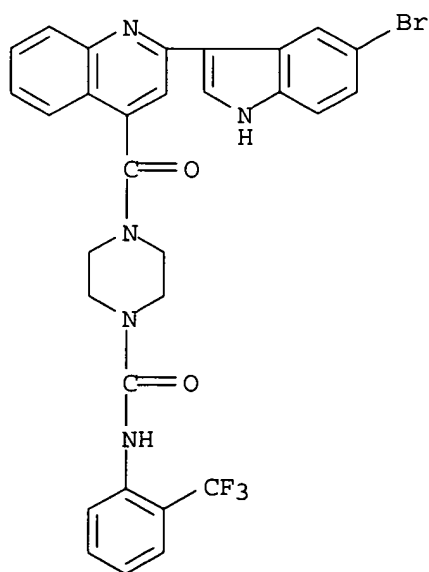
RN 218463-50-4 CAPLUS

CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-(2,4-dimethoxyphenyl)- (9CI) (CA INDEX NAME)



RN 218463-51-5 CAPLUS

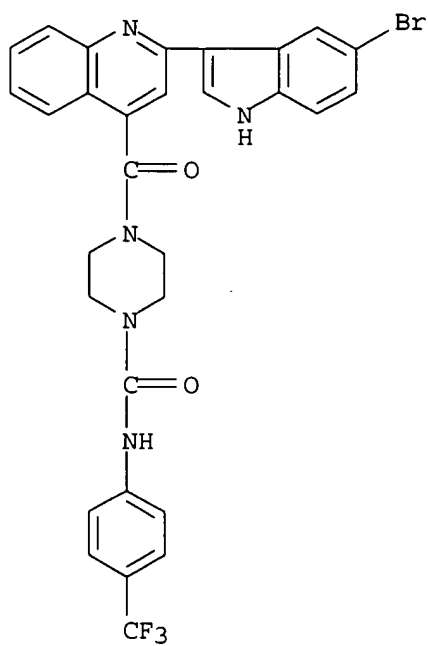
CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[2-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)



RN 218463-52-6 CAPLUS

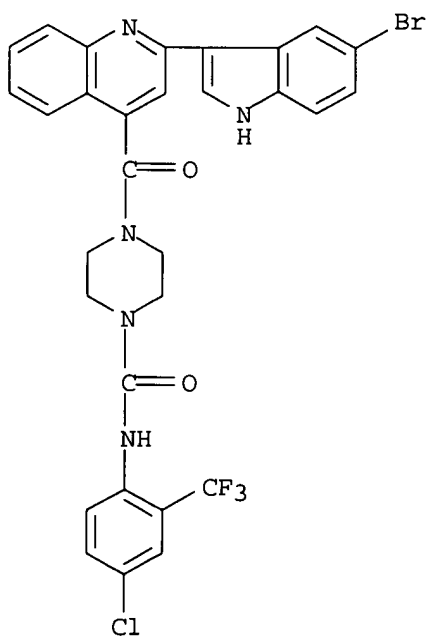
CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[4-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

10/622687



RN 218463-53-7 CAPLUS

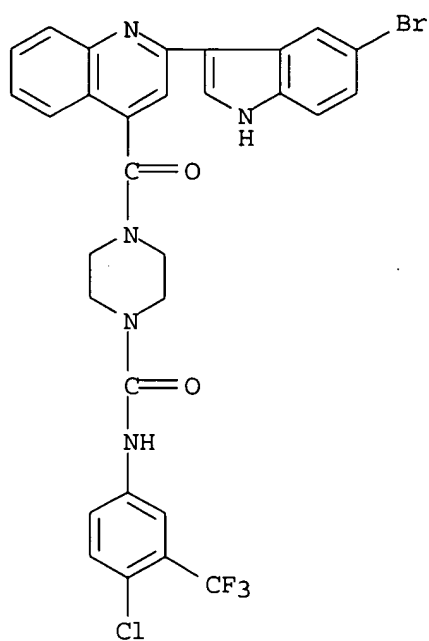
CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[4-chloro-2-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)



RN 218463-54-8 CAPLUS

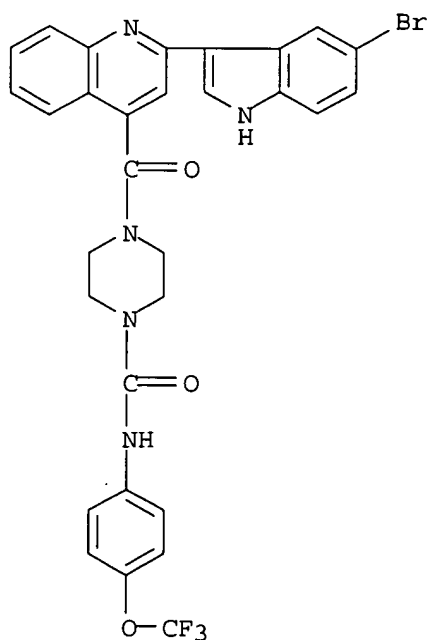
CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[4-chloro-3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

10/622687



RN 218463-55-9 CAPLUS

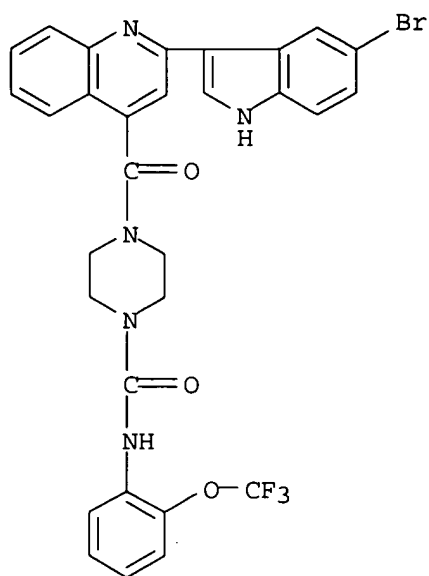
CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[4-(trifluoromethoxy)phenyl]- (9CI) (CA INDEX NAME)



RN 218463-56-0 CAPLUS

CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[2-(trifluoromethoxy)phenyl]- (9CI) (CA INDEX NAME)

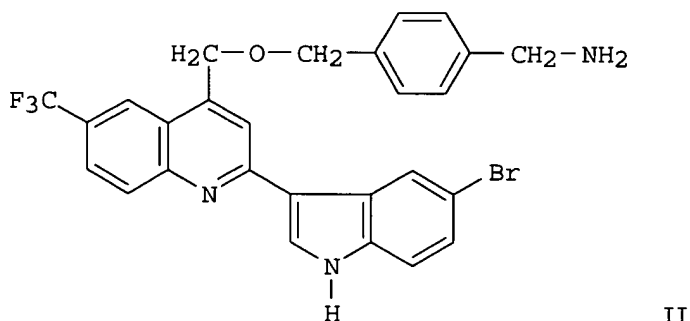
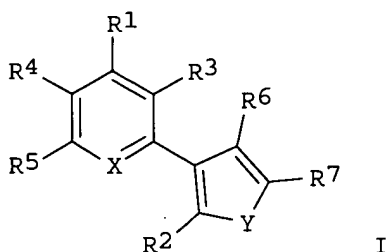
10/622687



RE.CNT 43      THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4    ANSWER 12 OF 25    CAPLUS    COPYRIGHT 2005 ACS on STN  
AN    2001:25778    CAPLUS  
DN    134:86170  
TI    Quinoline-indole antimicrobial agents  
IN    Cuny, Gregory D.; Hauske, James R.; Heefner, Donald L.; Hoemann, Michael  
      Z.; Kumaravel, Gnanasambandam; Melikian-badalian, Anita; Rossi, Richard F.  
PA    Sepracor, Inc., USA  
SO    U.S., 151 pp., Cont.-in-part of U.S. Ser. No. 45,051.  
      CODEN: USXXAM  
DT    Patent  
LA    English  
FAN.CNT 7

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	US 6172084	B1	20010109	US 1998-99640	19980618
	US 6207679	B1	20010327	US 1998-45051	19980319
	US 6103905	A	20000815	US 1998-213385	19981211
	US 6376670	B1	20020423	US 2000-658690	20000908
PRAI	US 1997-878781	B2	19970619		
	US 1998-45051	A2	19980319		
	US 1998-99640	A2	19980618		
	US 1998-213385	A1	19981211		
	US 2000-639622	A2	20000815		
OS	MARPAT 134:86170				
GI					



AB Indolylquinolines I [X = N; Y = NR; R-R3 = independently H, halogen, alkyl, alkenyl, alkynyl, OH, alkoxy, silyloxy, NH<sub>2</sub>, NO<sub>2</sub>, SH, alkylthio, imino, amido, phosphoryl, phosphonate, phosphine, CO, CONH<sub>2</sub>, anhydride, silyl, alkylsulfonyl, arylsulfonyl, alkylseleno, aldehyde, ester, heteroalkyl, CN, guanidine, amidine, acetal, ketal, amine oxide, (hetero)aryl, azide, aziridine, carbamate, epoxide, C(:NH)OH, imide, oxime, SO<sub>2</sub>NH<sub>2</sub>, CSNH<sub>2</sub>, thiocarbamate, urea, thiourea, or (CH<sub>2</sub>)<sub>m</sub>R80; R4R5, R6R7 = atoms required to complete an (un)substituted fused benzo ring system; R80 = (un)substituted aryl, cycloalkyl, cycloalkenyl, heterocycle, or polycycle; m = 0-8] were prepared by conventional or combinatorial synthetic methods for use as bactericides. Thus, 4-H<sub>2</sub>NCH<sub>2</sub>C<sub>6</sub>H<sub>4</sub>CO<sub>2</sub>H was esterified, N-tert-butoxycarbonylated, reduced, and treated with iodine to give 4-BocNHCH<sub>2</sub>C<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>I, which was coupled with the indolylquinolinemethanol fragment and deblocked to give the product II. II had MIC's <7 µg/mL against methicillin-resistant *Staphylococcus aureus*, vancomycin-resistant *Enterobacter* sp., and *Streptococcus pneumoniae*.

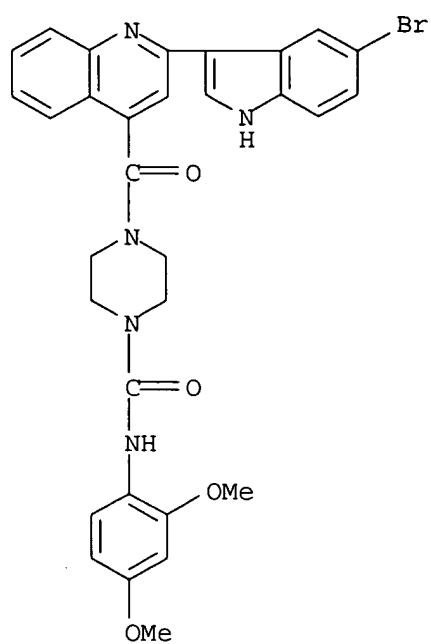
IT **218463-50-4P 218463-51-5P 218463-52-6P**  
**218463-53-7P 218463-54-8P 218463-55-9P**  
**218463-56-0P**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of indolylquinoline bactericides by conventional or combinatorial methods)

RN 218463-50-4 CAPLUS

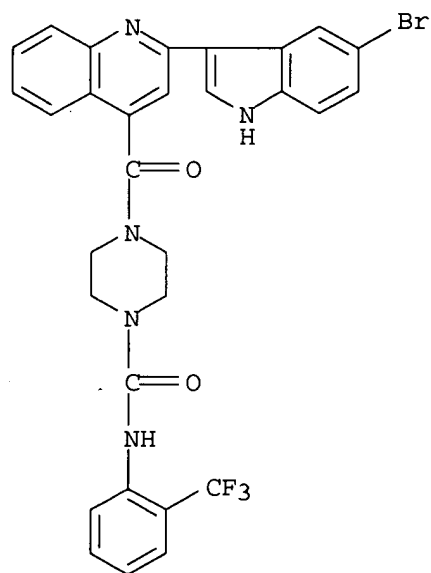
CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-(2,4-dimethoxyphenyl)- (9CI) (CA INDEX NAME)

10/622687



RN 218463-51-5 CAPLUS

CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[2-(trifluoromethyl)phenyl]-(9CI) (CA INDEX NAME)

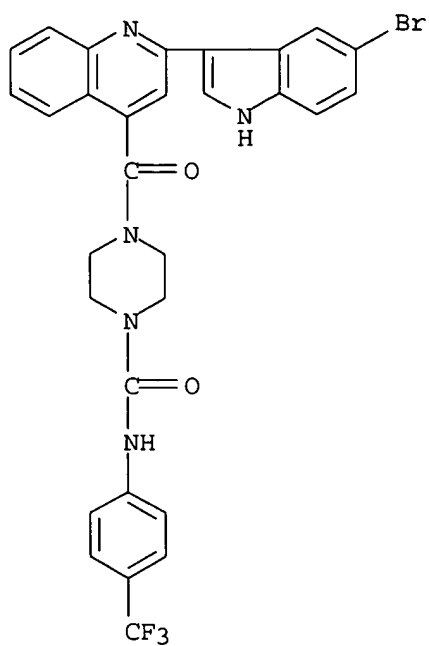


RN 218463-52-6 CAPLUS

CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[4-(trifluoromethyl)phenyl]-(9CI) (CA INDEX NAME)

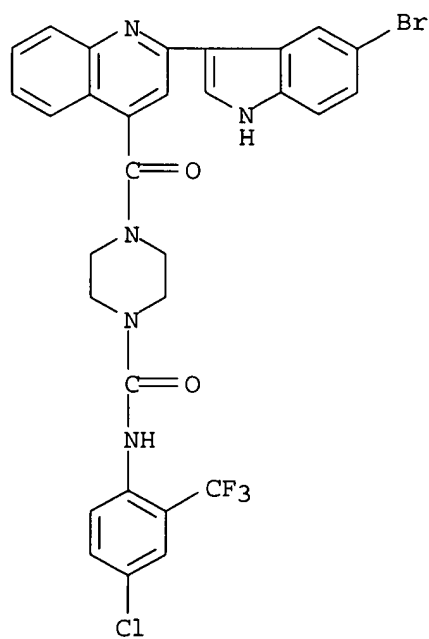


10/622687



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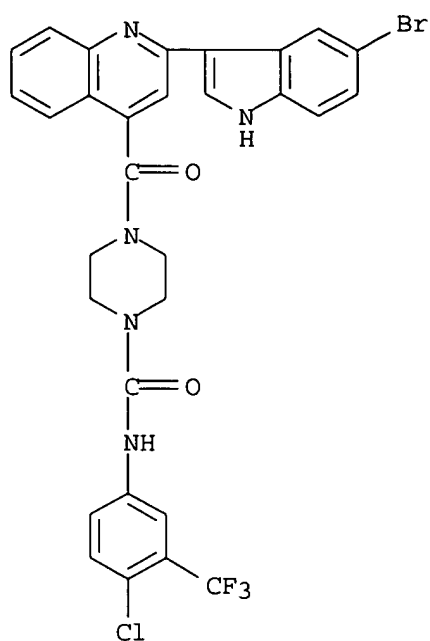
CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[4-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)



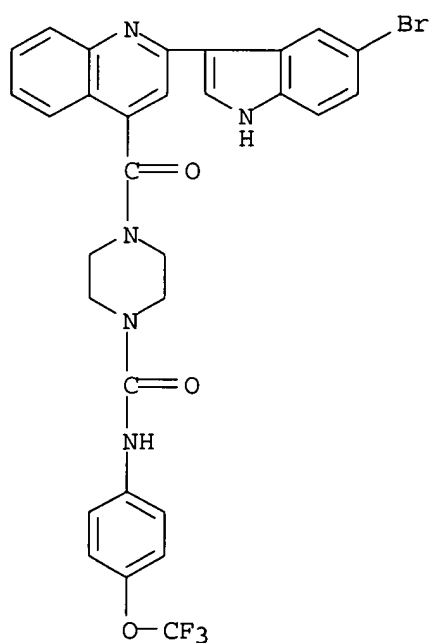
RN 218463-54-8 CAPLUS

CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[4-chloro-3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

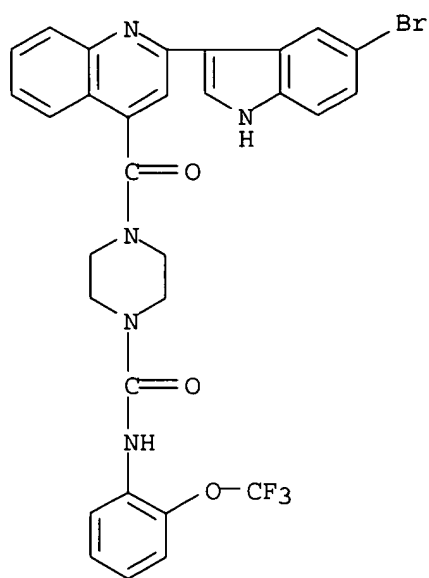
10/622687



RN 218463-55-9 CAPLUS  
CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[4-(trifluoromethoxy)phenyl]- (9CI) (CA INDEX NAME)



RN 218463-56-0 CAPLUS  
CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[2-(trifluoromethoxy)phenyl]- (9CI) (CA INDEX NAME)



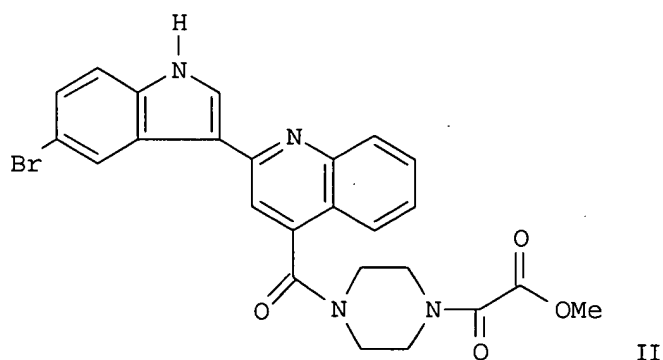
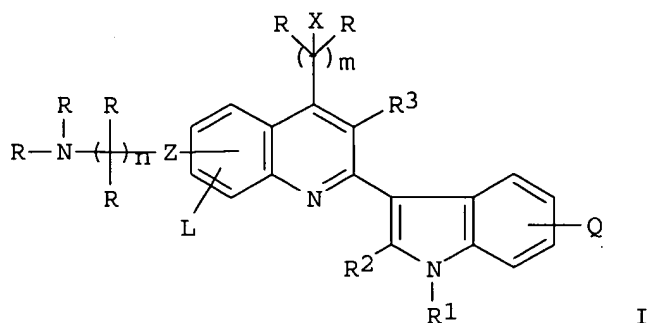
RE.CNT 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 13 OF 25 CAPLUS COPYRIGHT 2005 ACS on STN  
AN 2000:568542 CAPLUS  
DN 133:150464  
TI Preparation of quinolinylindole derivatives and compositions in use as  
antimicrobial agents  
IN Cuny, Gregory D.; Hauske, James R.; Heefner, Donald L.; Hoemann, Michael  
Z.; Kumaravel, Gnanasambandam; Melikian-Badalian, Anita; Rossi, Richard  
F.; Xie, Roger L.  
PA Sepracor, Inc., USA  
SO U.S., 228 pp., Cont.-in-part of U.S. Ser. No. 99,640.  
CODEN: USXXAM  
DT Patent  
LA English  
FAN.CNT 7

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6103905	A	20000815	US 1998-213385	19981211
	US 6207679	B1	20010327	US 1998-45051	19980319
	US 6172084	B1	20010109	US 1998-99640	19980618
	WO 2000034265	A2	20000615	WO 1999-US28744	19991203
	WO 2000034265	A3	20021003		
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	IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,				
	MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,				
	SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ,				
	BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,				
	DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,				
	CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	US 6376670	B1	20020423	US 2000-658690	20000908
PRAI	US 1997-878781	B2	19970619		
	US 1998-45051	A2	19980319		
	US 1998-99640	A2	19980618		
	US 1998-213385	A	19981211		
	US 2000-639622	A2	20000815		

10/622687

OS MARPAT 133:150464  
GI



AB Title compds. [I; Q = hydrophobic group, H; X = heterocyclyl, amidinyl, formamidinyl, guanidinyl, CN, CSNR2, OR, SR; Z = CC, (E)-CH:CH, (Z)-CH:CH, (CH2)2; L = hydrophobic group, H; R represents independently for each occurrence = H, alkyl, heteroalkyl, aryl, heteroaryl, acyl, sulfonyl; R1 = H, alkyl, aryl, 4-CH3C6H4SO2, (CH2)d; d = 1-6; R2 = H, alkyl, aryl; R3 = H, alkyl, aryl; m = 1-8; n = 1-4] and pharmaceutical preps. using title compds. are prepared as antimicrobial agents. The MIC value of I against at least one Gram-pos. bacterium ranged from 0.1-10 µg/mL. Thus, the title compound II was prepared and has a therapeutic index in primates of at least 10 for the inhibition of infection by at least one Gram-pos. bacterium.

IT 218463-50-4P 218463-51-5P 218463-52-6P  
218463-53-7P 218463-54-8P 218463-55-9P  
218463-56-0P

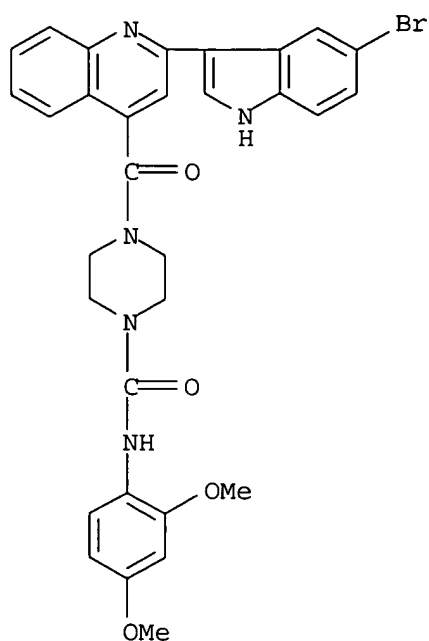
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation of quinolinylindole derivs. as antimicrobial agents)

RN 218463-50-4 CAPLUS

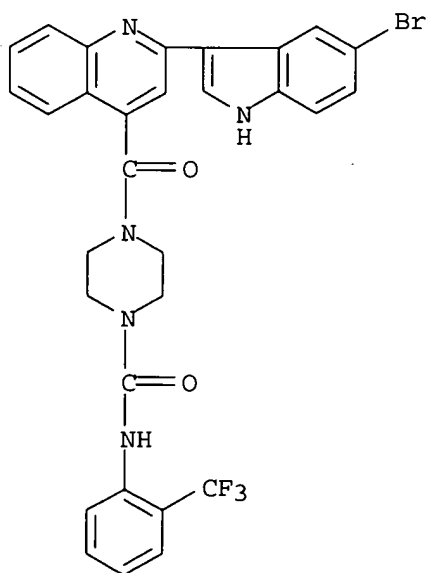
CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-(2,4-dimethoxyphenyl)- (9CI) (CA INDEX NAME)

10/622687



RN 218463-51-5 CAPLUS

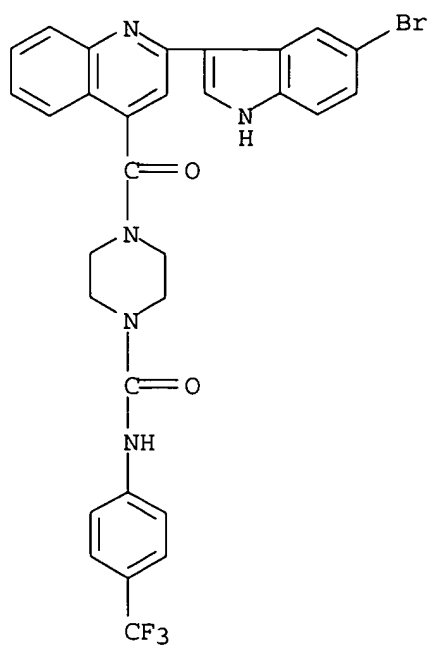
CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[2-(trifluoromethyl)phenyl]-(9CI) (CA INDEX NAME)



RN 218463-52-6 CAPLUS

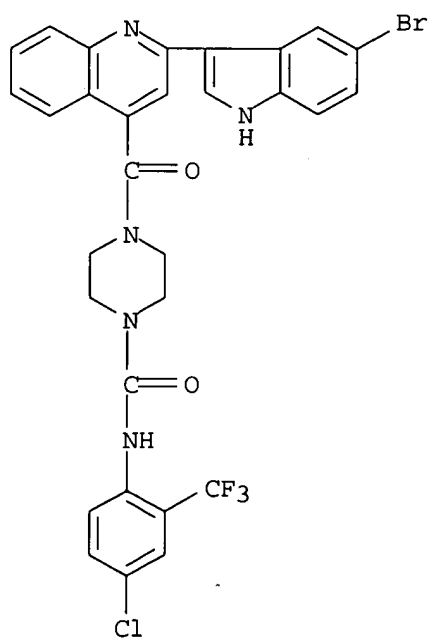
CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[4-(trifluoromethyl)phenyl]-(9CI) (CA INDEX NAME)

10/622687



RN 218463-53-7 CAPLUS

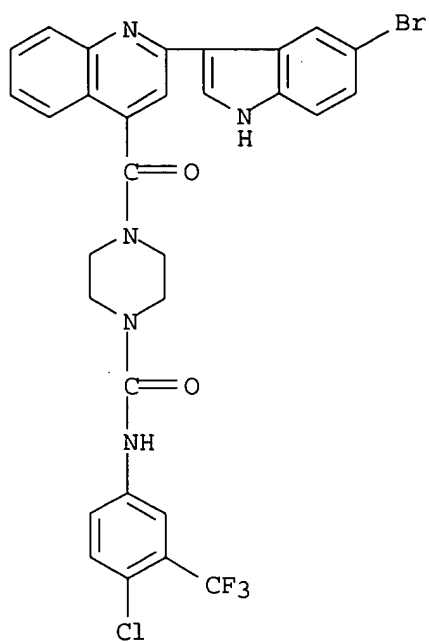
CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[4-chloro-2-(trifluoromethyl)phenyl] - (9CI) (CA INDEX NAME)



RN 218463-54-8 CAPLUS

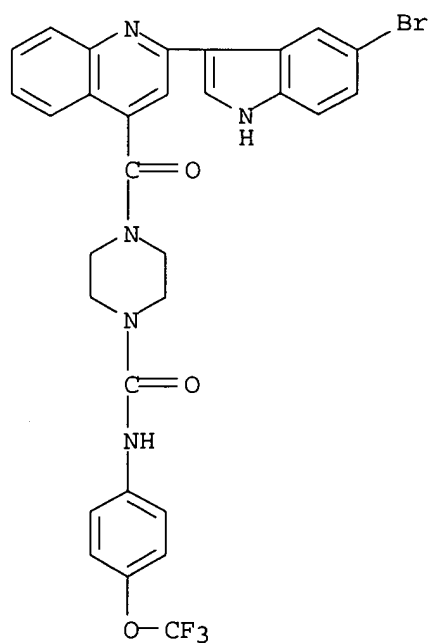
CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[4-chloro-3-(trifluoromethyl)phenyl] - (9CI) (CA INDEX NAME)

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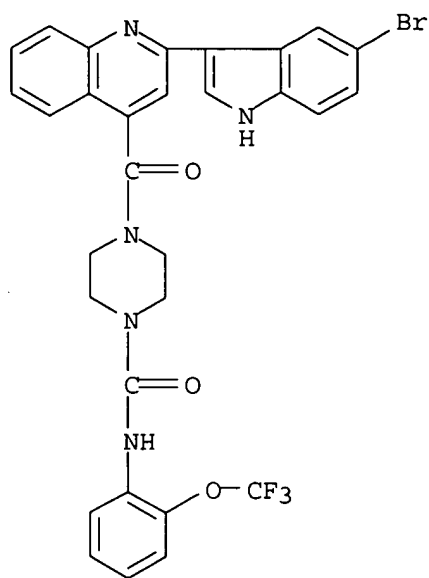
RN 218463-55-9 CAPLUS

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RN 218463-56-0 CAPLUS

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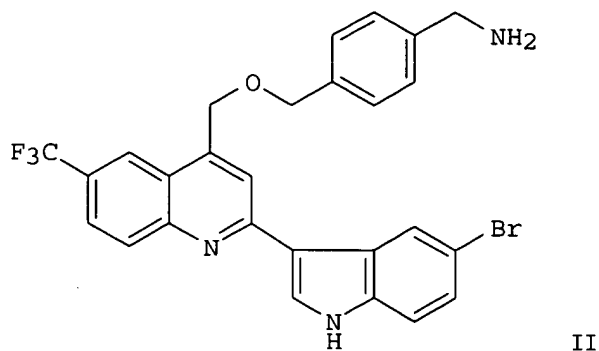
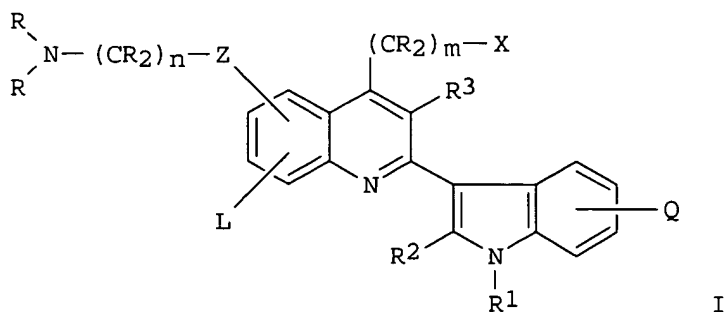


RE.CNT 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 14 OF 25 CAPLUS COPYRIGHT 2005 ACS on STN  
AN 2000:401813 CAPLUS  
DN 133:43453  
TI Preparation of 2-(3-indolyl)quinolines as antibacterial agents  
IN Cuny, Gregory D.; Hauske, James R.; Heefner, Donald L.; Hoemann, Michael  
Z.; Kumaravel, Gnanasambandam; Melikian-Badalian, Anita; Rossi, Richard  
F.; Xie, Roger L.  
PA Sepracor, Inc., USA  
SO PCT Int. Appl., 155 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 7

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000034265	A2	20000615	WO 1999-US28744	19991203
	WO 2000034265	A3	20021003		
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	IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,				
	MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,				
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	BY, KG, KZ, MD, RU, TJ, TM				
	RW:				
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	DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,				
	CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	US 6103905	A	20000815	US 1998-213385	19981211
PRAI	US 1998-213385	A	19981211		
	US 1997-878781	B2	19970619		
	US 1998-45051	A2	19980319		
	US 1998-99640	A2	19980618		
OS	MARPAT 133:43453				
GI					





AB The title compds. (I) [wherein L and Q = independently a hydrophobic group or is absent; X = heterocyclyl, (form)amidinyl, guanidinyl, CN, C(S)NR<sub>2</sub>, N(R)C(S)R, OR, SR, NR<sub>2</sub>, or PR<sub>2</sub>; Z = C.tplbond.C, CH:CH, or CH<sub>2</sub>CH<sub>2</sub>; R = independently H, (hetero)alkyl, (hetero)aryl, acyl, sulfonyl, etc.; R<sub>1</sub> = H, alkyl, aryl, p-toluenesulfonyl, phthalimidoalkyl, or aminoalkyl; R<sub>2</sub> and R<sub>3</sub> = independently H, alkyl, or acyl] were prepared by standard synthetic and solid phase combinatorial methods. For example, II was synthesized in a 3-step sequence involving: (1) reduction of 2-[5-bromo-1-(tert-butoxycarbonyl)indol-3-yl]-6-(trifluoromethyl)-4-quinolinecarboxylic acid to the alc. with LiAlH<sub>4</sub> (44%), (2) addition of 4-iodo-N-(tert-butoxycarbonyl)benzylamine (preparation given) to the alc. (82%), and (3) indolyl and amine deprotection using TFA (78%). Nearly two-thirds of the 534 indolylquinolines tested in assays against cultures of methicillin-resistant *Staphylococcus aureus* (MRSA), ciprofloxacin-resistant *Staphylococcus aureus* (CRSA), vancomycin-resistant *Enterococcus* spp. (VRE), and/or penicillin-resistant *Pseudomonas* (PRP) had in vitro min. inhibitory concns. (MICs) ≤ 10 μM. For 12 of the 15 compds. tested in vivo for toxicity, all mice were surviving 7 days after administration of 40 mg/kg doses.

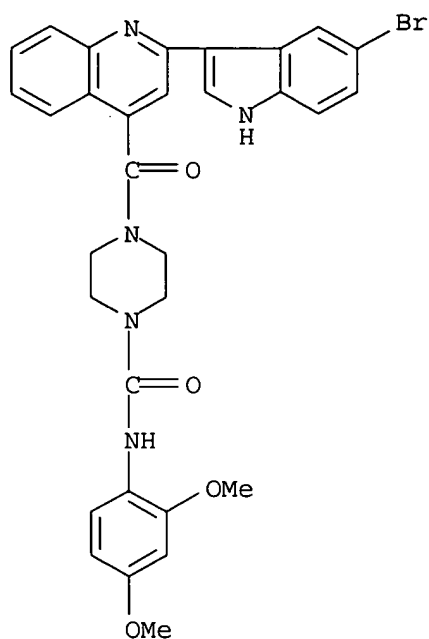
IT **218463-50-4P 218463-51-5P 218463-52-6P**  
**218463-53-7P 218463-54-8P 218463-55-9P**  
**218463-56-0P**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of 2-(3-indolyl)quinolines as antibacterial agents)

RN 218463-50-4 CAPLUS

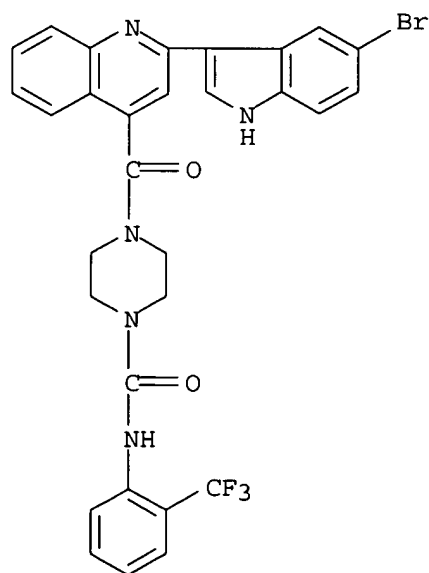
CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-(2,4-dimethoxyphenyl)- (9CI) (CA INDEX NAME)

10/622687



RN 218463-51-5 CAPLUS

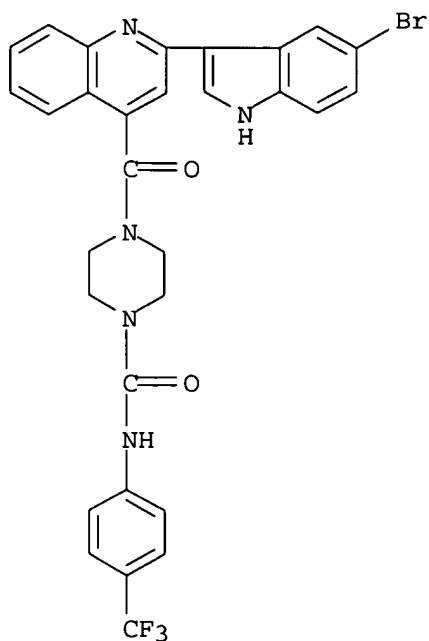
CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[2-(trifluoromethyl)phenyl]-(9CI) (CA INDEX NAME)



RN 218463-52-6 CAPLUS

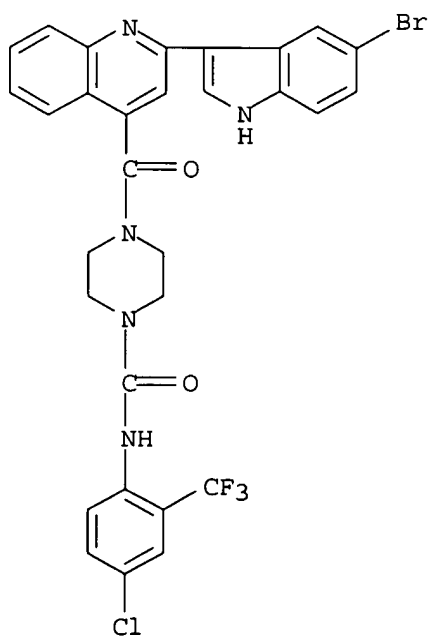
CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[4-(trifluoromethyl)phenyl]-(9CI) (CA INDEX NAME)

10/622687



RN 218463-53-7 CAPLUS

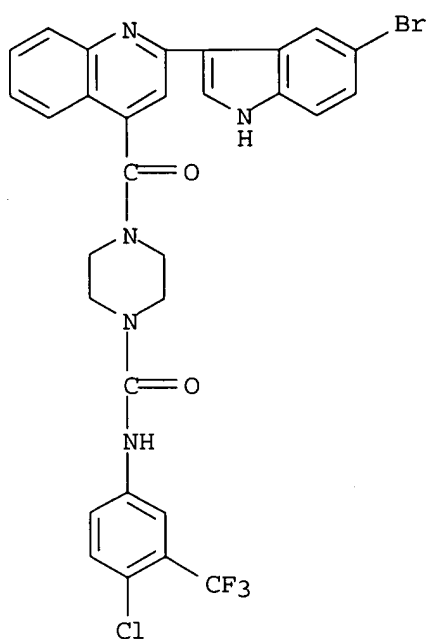
CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[4-chloro-2-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)



RN 218463-54-8 CAPLUS

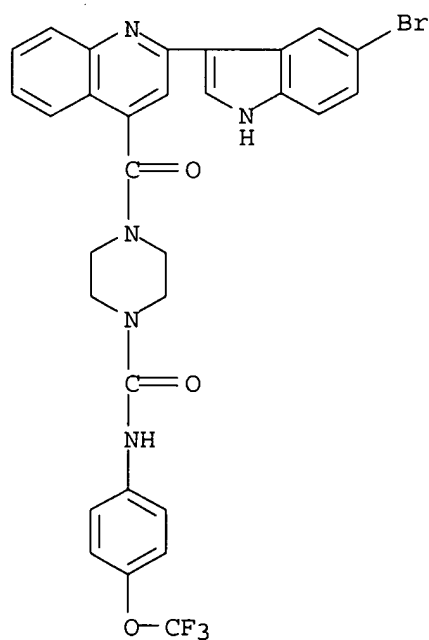
CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[4-chloro-3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

10/622687



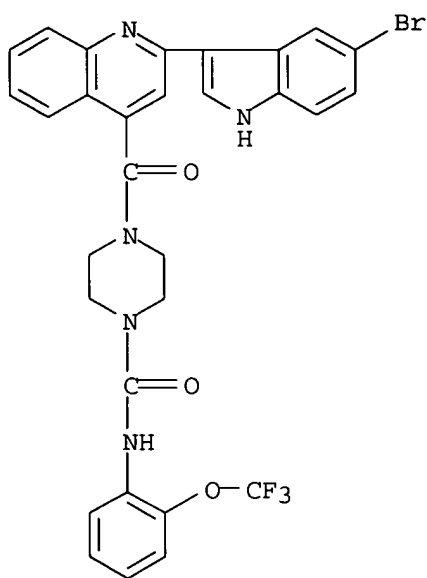
RN 218463-55-9 CAPLUS

CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[4-(trifluoromethoxy)phenyl]- (9CI) (CA INDEX NAME)



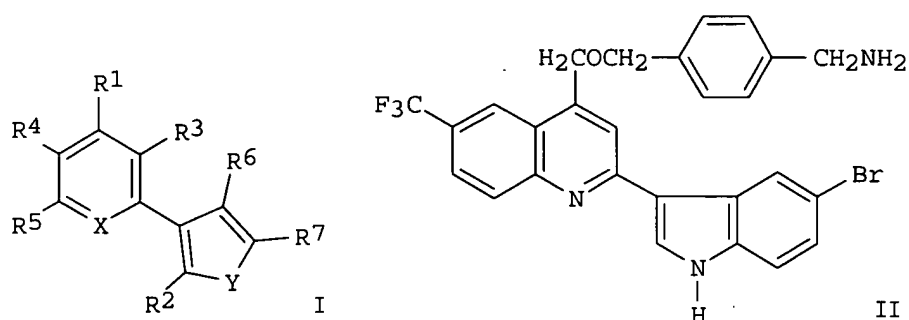
RN 218463-56-0 CAPLUS

CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[2-(trifluoromethoxy)phenyl]- (9CI) (CA INDEX NAME)



L4 ANSWER 15 OF 25 CAPLUS COPYRIGHT 2005 ACS on STN  
 AN 1999:27676 CAPLUS  
 DN 130:81422  
 TI Quinoline-indole antimicrobial agents  
 IN Kumaravel, Gnanasambandam; Hoemann, Michael Z.; Melikian-Badalian, Anita;  
 Cuny, Gregory D.; Hauske, James R.; Heefner, Donald L.; Rossi, Richard F.  
 PA Sepracor, Inc., USA  
 SO PCT Int. Appl., 146 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 7

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9857931	A2	19981223	WO 1998-US12762	19980618
	WO 9857931	A3	19990429		
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	RW:	GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG			
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	CA 2293418	AA	19981223	CA 1998-2293418	19980618
	EP 991623	A2	20000412	EP 1998-930396	19980618
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	JP 2002505689	T2	20020219	JP 1999-504835	19980618
	AU 757059	B2	20030130	AU 1998-79797	19980618
	NO 9906269	A	20000216	NO 1999-6269	19991217
PRAI	US 1997-878781	A	19970619		
	US 1998-45051	A2	19980319		
	WO 1998-US12762	W	19980618		
OS	MARPAT 130:81422				
GI					



AB Indolylquinolines I [X = (un)substituted CH, N, N(O), P, As; Y = (un)substituted CH<sub>2</sub>, NH, O, Ph, S, AsH, Se; R<sup>1</sup>-R<sup>3</sup> = H, halogen, alkyl, alkenyl, alkynyl, OH, alkoxy, silyloxy, NH<sub>2</sub>, NO<sub>2</sub>, SH, alkylthio, imino, amido, phosphoryl, phosphonate, phosphine, CO, CO<sub>2</sub>H, CONH<sub>2</sub>, anhydride, silyl, alkylsulfonyl, alkylseleno, aldehyde, ester, heteroalkyl, CN, epoxide, C(:NH)OH, oxime, SO<sub>2</sub>NH<sub>2</sub>, CSNH<sub>2</sub>, CS<sub>2</sub>NH<sub>2</sub>, urea, thiourea; R<sup>4</sup>R<sup>5</sup>, R<sup>6</sup>R<sup>7</sup> = atoms required to complete a monocyclic or polycyclic ring system] were prepared individually or by combinatorial synthesis for use as bactericides. Thus, 4-H<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>CO<sub>2</sub>H was esterified, N-tert-butoxycarbonylated, reduced and treated with iodine to give 4-BocNHC<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>I which was coupled with the indolylquinolinemethanol fragment and deblocked to give the product II. II had MIC's <7 µg/mL against methicillin-resistant *Staphylococcus aureus*, vancomycin-resistant *Enterobacter* sp., and *Streptococcus pneumoniae*.

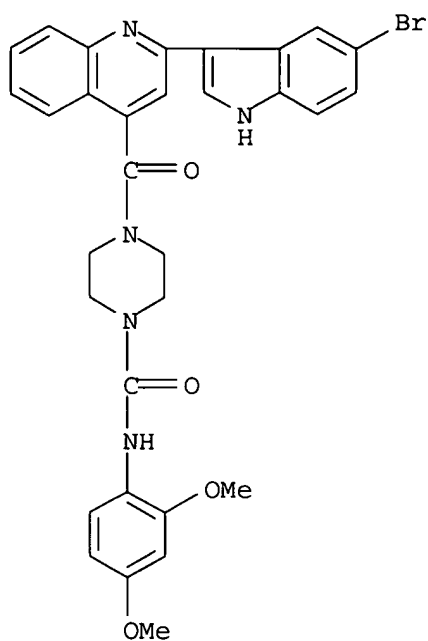
IT 218463-50-4P 218463-51-5P 218463-52-6P  
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218463-56-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of indolylquinoline bactericides)

RN 218463-50-4 CAPLUS

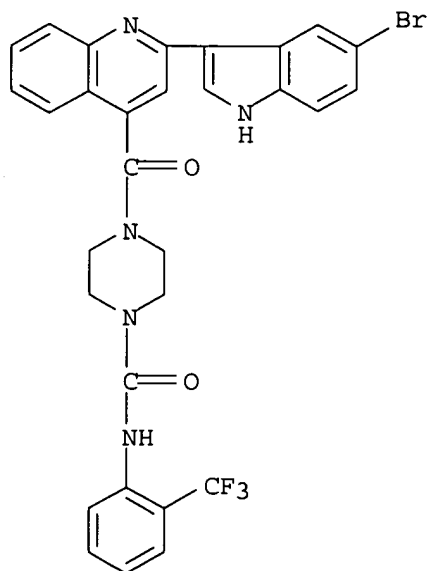
CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-(2,4-dimethoxyphenyl)- (9CI) (CA INDEX NAME)

10/622687



RN 218463-51-5 CAPLUS

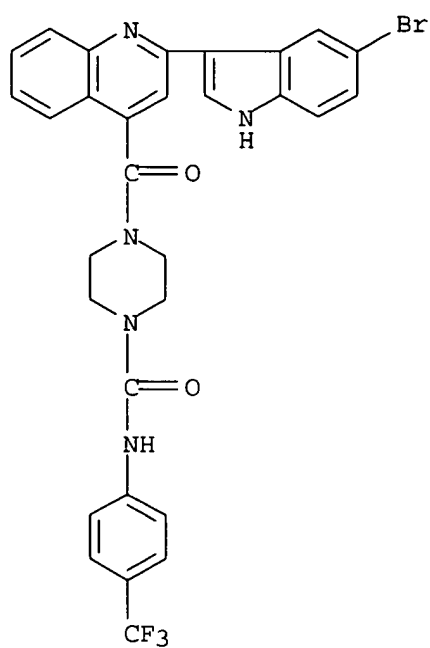
CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[2-(trifluoromethyl)phenyl]-(9CI) (CA INDEX NAME)



RN 218463-52-6 CAPLUS

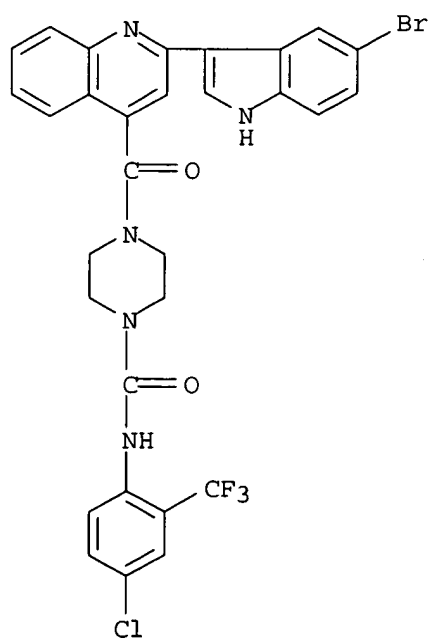
CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[4-(trifluoromethyl)phenyl]-(9CI) (CA INDEX NAME)

10/622687



RN 218463-53-7 CAPLUS

CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[4-chloro-2-(trifluoromethyl)phenyl] - (9CI) (CA INDEX NAME)

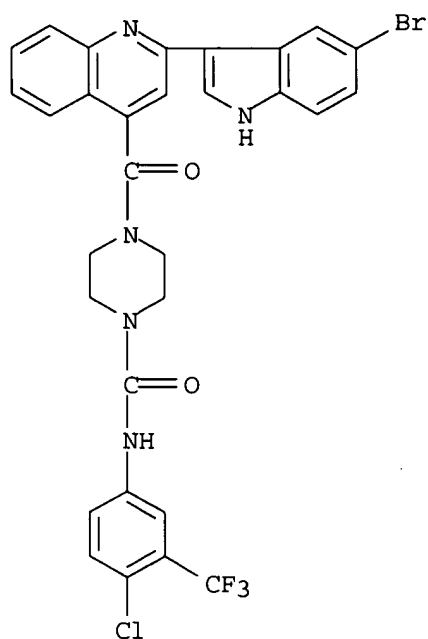


RN 218463-54-8 CAPLUS

CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[4-chloro-3-(trifluoromethyl)phenyl] - (9CI) (CA INDEX NAME)

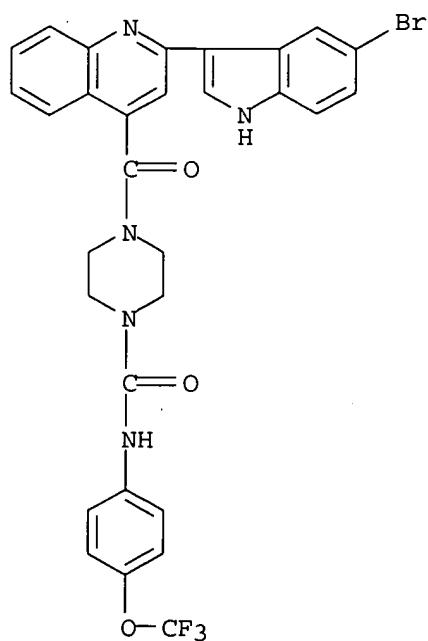


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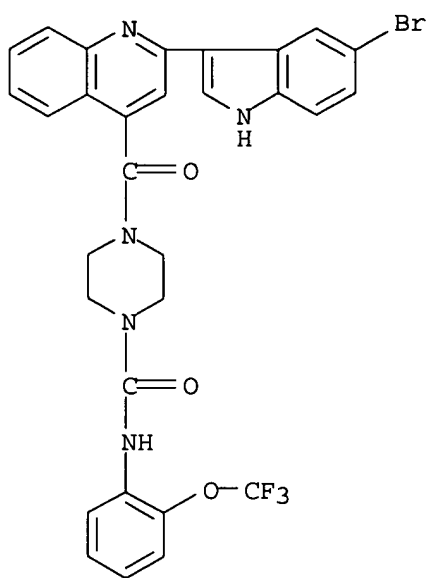
RN 218463-55-9 CAPLUS

CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[4-(trifluoromethoxy)phenyl]- (9CI) (CA INDEX NAME)



RN 218463-56-0 CAPLUS

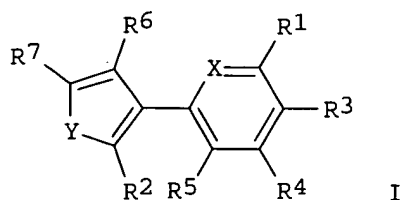
CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[2-(trifluoromethoxy)phenyl]- (9CI) (CA INDEX NAME)



L4 ANSWER 16 OF 25 CAPLUS COPYRIGHT 2005 ACS on STN  
 AN 1999:9834 CAPLUS  
 DN 130:81421  
 TI Preparation of indolyl(iso)quinolines as bactericides  
 IN Kumaravel, Gnanasambandam; Hoemann, Michael Z.; Melikian-Badalian, Anita;  
 Cuny, Gregory D.; Hauske, James R.; Heefner, Donald L.; Rossi, Richard F.  
 PA Sepracor Inc., USA  
 SO PCT Int. Appl., 138 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 7

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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	KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX,				
	NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT,				
	UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW:				
	GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,				
	FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,				
	CM, GA, GN, ML, MR, NE, SN, TD, TG				
	AU 9882586	A1	19990104	AU 1998-82586	19980618
PRAI	US 1997-878781	A2	19970619		
	WO 1998-US12706	W	19980618		
OS	MARPAT 130:81421				
GI					

10/622687



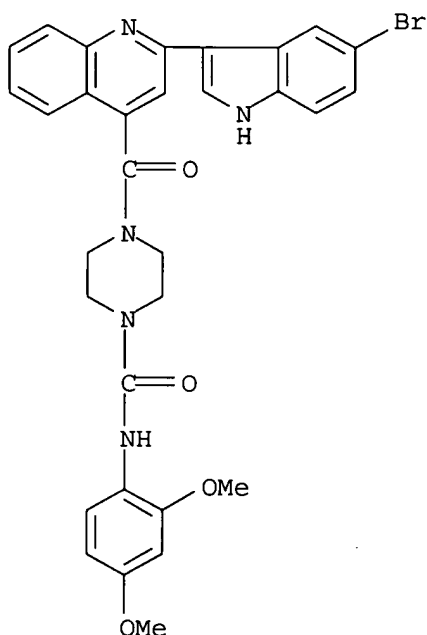
AB Title compds. [I; X = CR, N, NO, P, As; Y = CR<sub>2</sub>, NR, O, PR, S, AsR, Se; R, R<sub>1</sub>-R<sub>3</sub> = H, halo, alkyl, alkoxy, etc.; R<sub>4</sub>R<sub>5</sub>, R<sub>6</sub>R<sub>7</sub> = atoms to complete (un)substituted rings] were prepared. Thus, solid-phase synthesis of a 1-(3-indolyl)isoquinoline-3-aminoalkylcarboxamide was described. Data for biol. activity of I were given.

IT **218463-50-4P 218463-51-5P 218463-52-6P**  
**218463-53-7P 218463-54-8P 218463-55-9P**  
**218463-56-0P**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of indolyl(iso)quinolines as bactericides)

RN 218463-50-4 CAPLUS

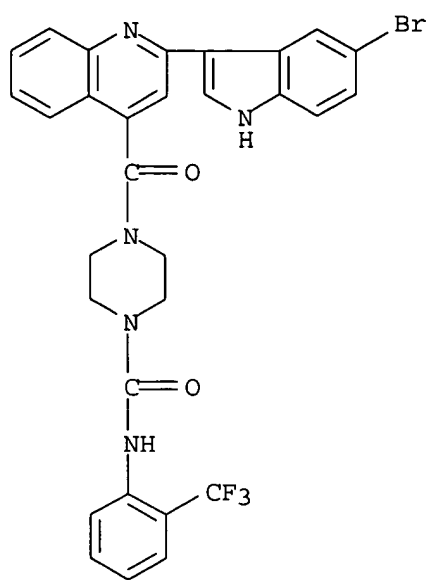
CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-(2,4-dimethoxyphenyl)- (9CI) (CA INDEX NAME)



RN 218463-51-5 CAPLUS

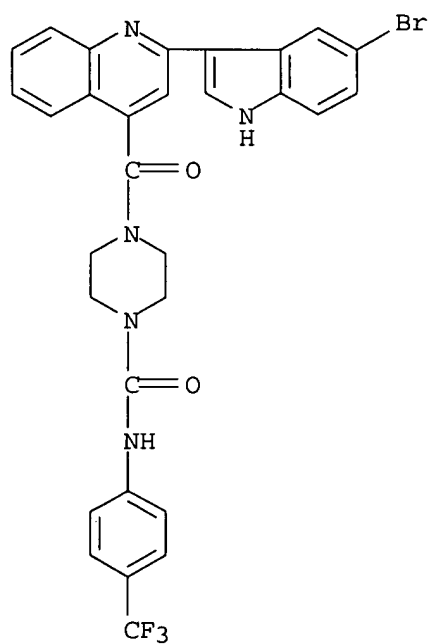
CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[2-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

10/622687



RN 218463-52-6 CAPLUS

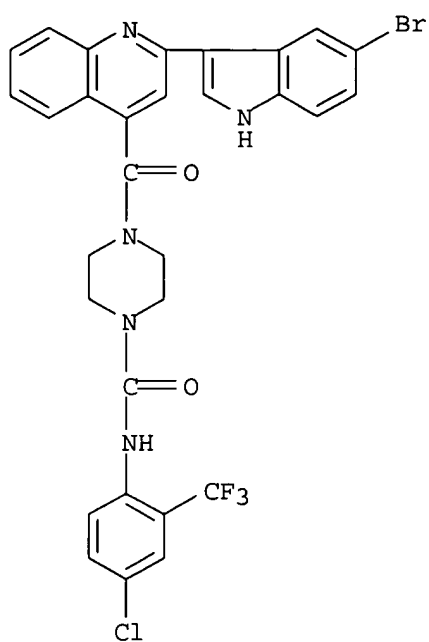
CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[4-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)



RN 218463-53-7 CAPLUS

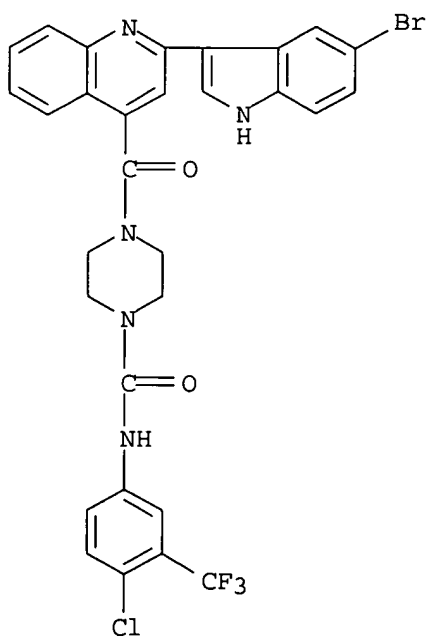
CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[4-chloro-2-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

10/622687



RN 218463-54-8 CAPLUS

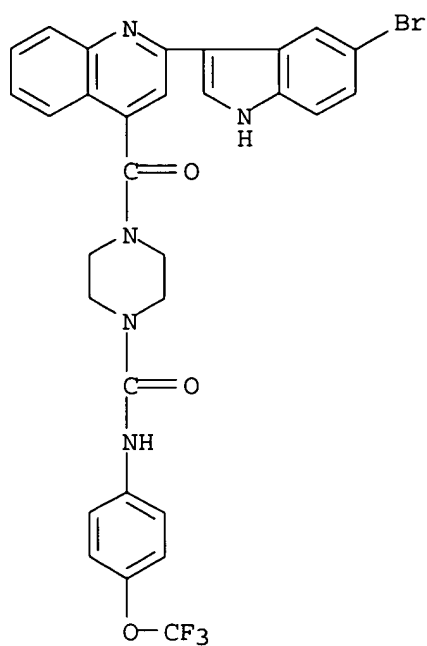
CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[4-chloro-3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)



RN 218463-55-9 CAPLUS

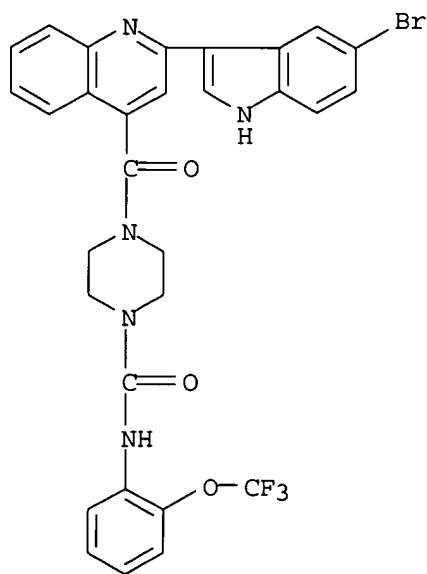
CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[4-(trifluoromethoxy)phenyl]- (9CI) (CA INDEX NAME)

10/622687



RN 218463-56-0 CAPLUS

CN 1-Piperazinecarboxamide, 4-[[2-(5-bromo-1H-indol-3-yl)-4-quinolinyl]carbonyl]-N-[2-(trifluoromethoxy)phenyl]- (9CI) (CA INDEX NAME)



RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 17 OF 25 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1995:958518 CAPLUS

DN 124:146212

TI 8-Chloro-10,11-dihydro-10-(1-piperazinylcarbonyl)dibenz[b,f][1,4]oxazepine derivatives and analogs as analgesics and prostaglandin-E2 antagonists

IN Hansen, Donald W., Jr.; Peterson, Karen B.

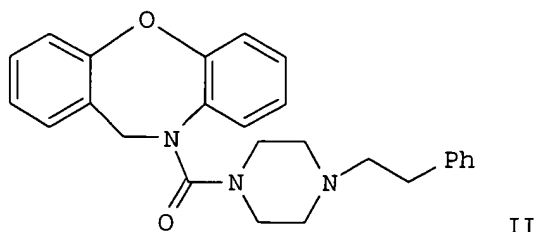
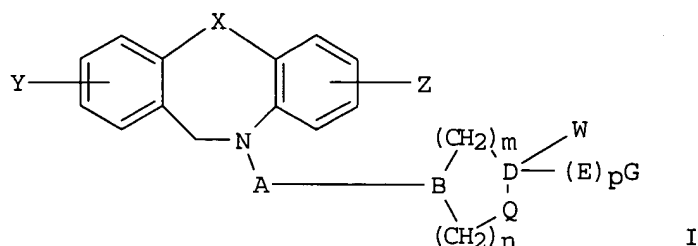
10/622687

PA G. D. Searle and Co., USA  
 SO U.S., 38 pp. Cont.-in-part of U.S. 5,354,747.  
 CODEN: USXXAM

DT Patent  
 LA English

FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5461047	A	19951024	US 1994-245349	19940518
	US 5354747	A	19941011	US 1993-79021	19930616
	CA 2165159	AA	19941222	CA 1994-2165159	19940602
	WO 9429286	A1	19941222	WO 1994-US6029	19940602
	W:	AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, HU, JP, KP, KR, KZ, LK, LU, LV, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TT, UA, US, UZ, VN			
	RW:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG			
	AU 9471387	A1	19950103	AU 1994-71387	19940602
	EP 703908	A1	19960403	EP 1994-920687	19940602
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE			
	JP 09500107	T2	19970107	JP 1994-501874	19940602
PRAI	US 1993-79021	A2	19930616		
	US 1994-245349	A	19940518		
	WO 1994-US6029	W	19940602		
OS	MARPAT 124:146212				
GI					



AB The present invention provides substituted dibenzoxazepine and dibenzothiazepine compds. I or a pharmaceutically-acceptable salt thereof, wherein: W = (H)r; Q = [CH(R)q]t; X is oxygen, sulfur, SO, or SO<sub>2</sub>; Y is hydrogen, halogen or hydroxy; Z is hydrogen or halogen; A is alkylene or carbonyl; B is CH or nitrogen; D is carbon or nitrogen; E is alkylene, carbonyl, alkyleneamino or alkylencarbonyl; G is hydrogen, alkyl, cycloalkyl, alkoxy, aminoalkyl, aminocycloalkyl, aryl, alkylenearyl or aryl-substituted aryl; R is hydrogen or CO<sub>2</sub>R<sub>1</sub>; R<sub>1</sub> is hydrogen or alkyl; m is an integer of from 0 to 4; n is an integer of from 0 to 4; r is 0 or 1; q is an integer of from 0 to 1; t is an integer of from 0 to 1; and p is

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an integer of from 0 to 1 (with provisos) which are useful as analgesic agents for the treatment of pain, and for prostaglandin-E2 mediated diseases. Thus, e.g., 10,11-dihydro-10-[[4-(2-phenylethyl)-1-piperazinyl]carbonyl]dibenz[b,f][1,4]oxazepine, monohydrochloride (II.HCl) was synthesized by reductive alkylation of 8-chloro-10,11-dihydro-10-(1-piperazinylcarbonyl)dibenz[b,f][1,4]oxazepine, monohydrochloride (preparation given) with phenylacetaldehyde, and exhibited analgesic activity of 10/10 in the writhing assay and prostaglandin-E2 antagonism with dose ratio of EC50 doses = 2.6.

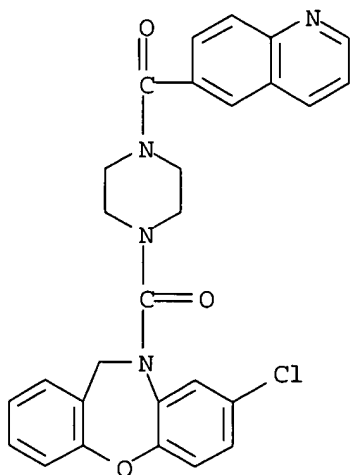
IT 163839-47-2P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(8-chloro-10,11-dihydro-10-(1-piperazinylcarbonyl)dibenz[b,f][1,4]oxazepine derivs. and analogs as analgesics and prostaglandin-E2 antagonists)

RN 163839-47-2 CAPLUS

CN Dibenz[b,f][1,4]oxazepine, 8-chloro-10,11-dihydro-10-[[4-(6-quinolinylcarbonyl)-1-piperazinyl]carbonyl]- (9CI) (CA INDEX NAME)



L4 ANSWER 18 OF 25 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1995:682580 CAPLUS

DN 123:83397

TI Analgesic dibenzoxazepines and dibenzothiazepines

IN Hansen, Donald Willis, Jr.; Peterson, Karen Berenice

PA G.D. Searle and Co., USA

SO PCT Int. Appl., 189 pp.

CODEN: PIXXD2

DT Patent

LA English

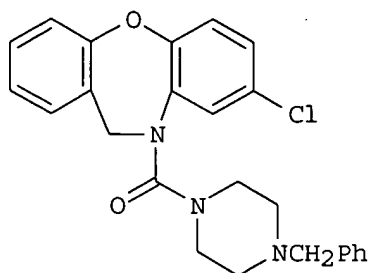
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9429286	A1	19941222	WO 1994-US6029	19940602
	W: AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, HU, JP, KP, KR, KZ, LK, LU, LV, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TT, UA, US, UZ, VN				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	US 5354747	A	19941011	US 1993-79021	19930616
	US 5461047	A	19951024	US 1994-245349	19940518



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AU 9471387	A1	19950103	AU 1994-71387	19940602
EP 703908	A1	19960403	EP 1994-920687	19940602
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
JP 09500107	T2	19970107	JP 1994-501874	19940602
PRAI US 1993-79021	A	19930616		
US 1994-245349	A	19940518		
WO 1994-US6029	W	19940602		
OS	MARPAT 123:83397			
GI				

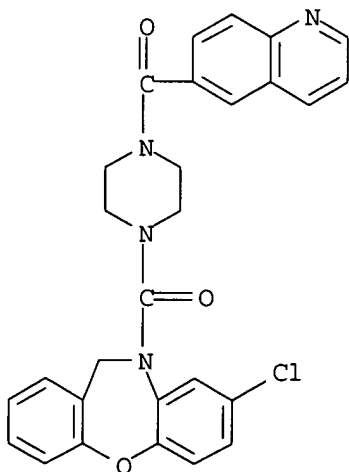


AB Dibenz[b,f][1,4]oxazepines and dibenz[b,f][1,4]thizepines were disclosed for the treatment of prostaglandin-E2 mediated diseases. A claimed example compound is 8-chloro-10,11-dihydro-10-[[4-(phenylmethyl)-1-piperazinyl]carbonyl]dibenz[b,f][1,4]oxazepine hydrochloride (I).

IT **163839-47-2P**  
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of dibenz[b,f][1,4]oxazepines analgesics)

RN 163839-47-2 CAPLUS

CN Dibenz[b,f][1,4]oxazepine, 8-chloro-10,11-dihydro-10-[[4-(6-quinolinylcarbonyl)-1-piperazinyl]carbonyl]- (9CI) (CA INDEX NAME)

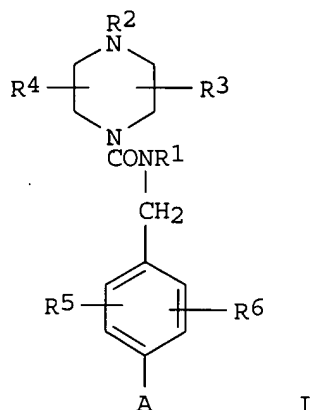


L4 ANSWER 19 OF 25 CAPLUS COPYRIGHT 2005 ACS on STN  
AN 1995:234787 CAPLUS  
DN 122:31563

10/622687

TI Preparation of N,N-diacylpiperazines as central nervous system agents  
 IN Greenlee, William J.; Wu, Mu T.  
 PA Merck and Co., Inc., USA  
 SO U.S., 25 pp.  
 CODEN: USXXAM  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5348955	A	19940920	US 1993-80893	19930622
	WO 9500498	A1	19950105	WO 1994-US5789	19940523
	W: AU, BB, BG, BR, BY, CA, CN, CZ, FI, HU, JP, KR, KZ, LK, LV, MG, MN, MW, NO, NZ, PL, RO, RU, SD, SI, SK, TT, UA, US, UZ				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	AU 9471383	A1	19950117	AU 1994-71383	19940523
PRAI	US 1993-80893	A1	19930622		
	WO 1994-US5789	W	19940523		
OS	MARPAT 122:31563				
GI					



AB Title compds. I (A = substituted Ph or thienyl; R1 = H, C1-8 alkyl, C3-7 cycloalkyl, (substituted) Ph, C1-4-(substituted)aryl; R2 = C1-6 alkyl, aryl-CH2, C3-7-cycloalkyl-CH2, etc.; R3 = C1-4 alkyl-SCH2, C1-4 alkyl-OCH2, etc.; R4 = H, C1-6 alkyl, R3; R5 = H, C1-6alkyl, C2-6 alkenyl, C2-4 alkynyl, halo, etc.; R6 = H, R5), are prepared 1-[2-(1-Trityltetrazol-5-yl)biphenyl-4-yl]methyl bromide and Et3N was treated with pentylamine to give the N-pentyl derivative which was phosgenated to give the carbamoyl derivative and this was treated with (S)-1-(diphenylcarbamoyl)piperazine-2-carboxylic acid acetate salt (preparation given) to give after workup the title compound (S)-1-(diphenylcarbamoyl)-4-N-pentyl-N-[[2-(1H-tetrazol-5-yl)biphenyl-4-yl]methyl]carbamoyl]piperazine-2-carboxylic acid. Assays are given to demonstrate the usefulness of I as central nervous system agents. Pharmaceutical formulations comprising I are given.

IT **147145-54-8P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

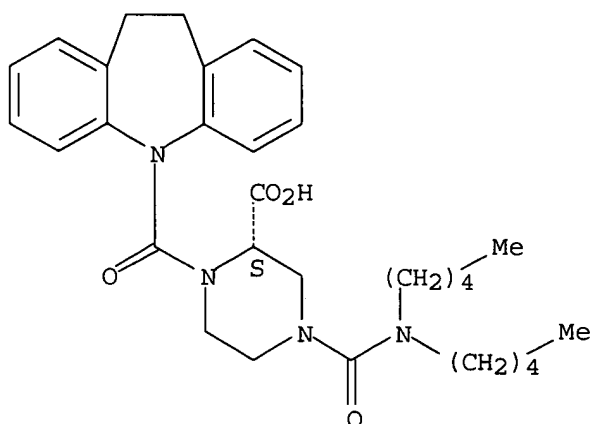
(preparation of diacylpiperazines as central nervous system agents)

RN 147145-54-8 CAPLUS

CN 2-Piperazinecarboxylic acid, 1-[(10,11-dihydro-5H-dibenz[b,f]azepin-5-yl)carbonyl]-4-[(dipentylamino)carbonyl]-, (S)- (9CI) (CA INDEX NAME)

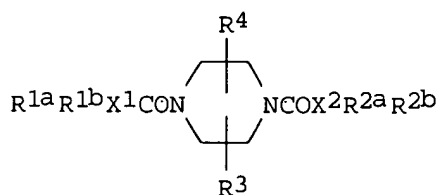
10/622687

Absolute stereochemistry.



L4 ANSWER 20 OF 25 CAPLUS COPYRIGHT 2005 ACS on STN  
 AN 1995:231027 CAPLUS  
 DN 122:10062  
 TI Preparation of N,N-diacylpiperazines as central nervous system agents  
 IN Ashton, Wallace T.; Dorn, Conrad P.; Greenlee, William J.; Maccoss, Malcolm; Mills, Sander G.; Wu, Mu T.  
 PA Merck and Co., Inc., USA  
 SO U.S., 32 pp. Cont.-in-part of U.S. Ser. No. 703,953, abandoned.  
 CODEN: USXXAM  
 DT Patent  
 LA English  
 FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5292726	A	19940308	US 1992-885416	19920519
	WO 9220661	A1	19921126	WO 1992-US4189	19920519
	W: CA, JP				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, MC, NL, SE				
PRAI	US 1991-703953	B2	19910522		
	US 1992-885416	A	19920519		
OS	MARPAT 122:10062				
GI					



AB Title compds. I (R1a = H, C1-8 alkyl, (substituted) Ph, (substituted) C1-4 alkylphenyl; R1b = R1a, C3-7 cycloalkyl, R1a-CH2; R2a, R2b = (substituted) Ph, and the Ph groups of R2a and R2b may be joined together at the o-C through a C-C single bond or a C1-3 alkylene to form a tricyclyl with X2 to which they are attached; X1 = N, HC, O, with the proviso that if X1 = O, R1a is absent; X2 = N, HC, with the proviso that if X1 = HC, X2 ≠ HC; R3 = C1-4 alkyl, HOCH2, H2NCH2, HO2C, C1-4-O2C, F3COCH2, etc.;

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R4 = H, R3) or a salt thereof, useful as central nervous system agents (no data), are prepared (±)-4-(Benzyloxycarbonyl)-2-piperazinecarboxylic acid, NaOH, acetone and Ph<sub>2</sub>CHCOCl were reacted to give after workup (±)-I (R1a = CH<sub>2</sub>, R1b = R2a = R2b = Ph, X1 = O, X2 = HC).

Pharmaceutical formulations comprising I are given.

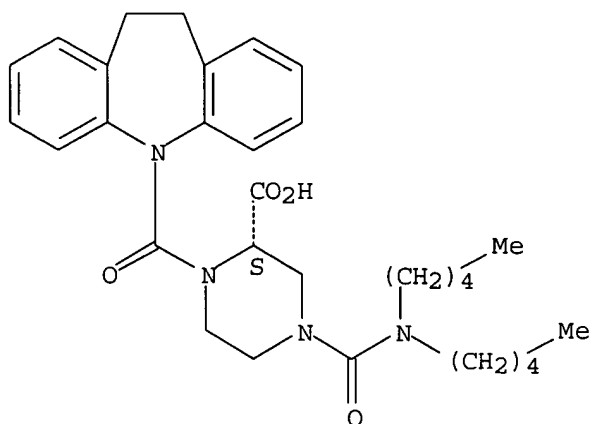
IT **147145-54-8P**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of, as central nervous system agent)

RN 147145-54-8 CAPLUS

CN 2-Piperazinecarboxylic acid, 1-[(10,11-dihydro-5H-dibenz[b,f]azepin-5-yl)carbonyl]-4-[(dipentylamino)carbonyl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L4 ANSWER 21 OF 25 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1995:205963 CAPLUS

DN 123:9468

TI 2-, 3-, 4-, 5-, 6-, 7-, 8-, 9- and/or 10-substituted dibenzoxazepine and dibenzthiazepine compounds as analgesics and prostaglandin E<sub>2</sub> antagonists, pharmaceutical compositions and methods of use

IN Hansen, Donald W., Jr.; Peterson, Karen B.

PA G.D. Searle and Co., USA

SO U.S., 39 pp.

CODEN: USXXAM

DT Patent

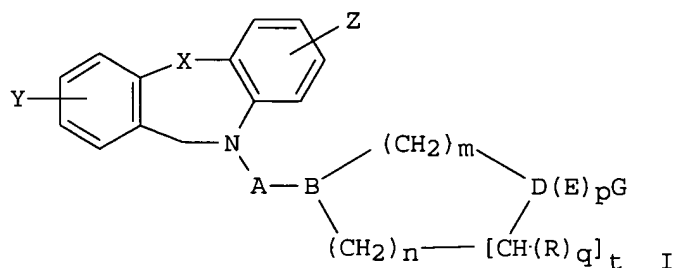
LA English

FAN.CNT 3

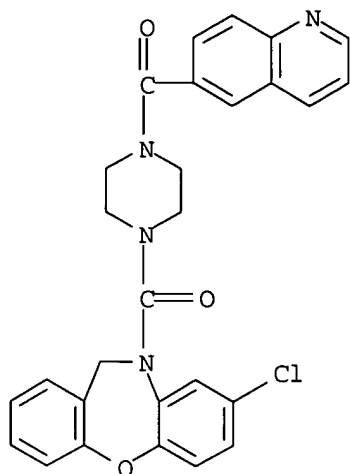
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5354747	A	19941011	US 1993-79021	19930616
	US 5461047	A	19951024	US 1994-245349	19940518
	CA 2165159	AA	19941222	CA 1994-2165159	19940602
	WO 9429286	A1	19941222	WO 1994-US6029	19940602
	W: AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, HU, JP, KP, KR, KZ, LK, LU, LV, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TT, UA, US, UZ, VN				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	AU 9471387	A1	19950103	AU 1994-71387	19940602
	EP 703908	A1	19960403	EP 1994-920687	19940602
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
	JP 09500107	T2	19970107	JP 1994-501874	19940602

10/622687

PRAI US 1993-79021 A2 19930616  
US 1994-245349 A 19940518  
WO 1994-US6029 W 19940602  
OS MARPAT 123:9468  
GI

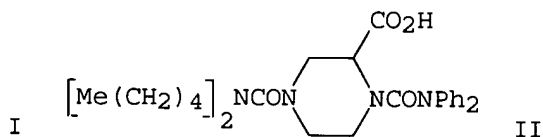
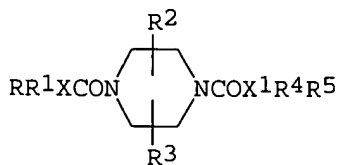


- AB The present invention provides substituted dibenzoxazepine and dibenzthiazepine compds. I which are useful as analgesic agents for the treatment of pain, and for prostaglandin-E2 mediated diseases, pharmaceutical compns. comprising a therapeutically-effective amount of I in combination with a pharmaceutically-acceptable carrier, a method for eliminating or ameliorating pain in an animal comprising administering a therapeutically-effective amount of I to the animal, and a method for treating prostaglandin-E2 mediated diseases in an animal comprising administering a therapeutically-effective amount of I to the animal. Analgesic activity was measured using the writhing assay at standard dose of 10 mpk/g body weight: I produced analgesia in from 2/10 to 10/10 of the mice. Prostaglandin E2 antagonism assay (inhibition of contraction of guinea pig ileum): dose ratio of EC50 doses of from 0.8 to 32. Pharmaceutical compns. were given.
- IT **163839-47-2P**, 1[-Chlorodibenz[b,f][1,4]oxazepin-10(11H)-yl)carbonyl]-4-[(6-quinolinyl)carbonyl]yl)carbonyl]-4-[(6-quinolinyl)carbonyl]piperazine  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(substituted dibenzoxazepine and dibenzthiazepine compds. as analgesics and prostaglandin E2 antagonists)
- RN 163839-47-2 CAPLUS
- CN Dibenz[b,f][1,4]oxazepine, 8-chloro-10,11-dihydro-10-[[4-(6-quinolinylcarbonyl)-1-piperazinyl]carbonyl]- (9CI) (CA INDEX NAME)



L4 ANSWER 22 OF 25 CAPLUS COPYRIGHT 2005 ACS on STN  
 AN 1993:234089 CAPLUS  
 DN 118:234089  
 TI N,N-diacylpiperazines  
 IN Ashton, Wallace T.; Greenlee, William J.; Wu, Mu Tsu; Dorn, Conrad P.;  
 MacCoss, Malcolm; Mills, Sander G.  
 PA Merck and Co., Inc., USA  
 SO PCT Int. Appl., 149 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9220661	A1	19921126	WO 1992-US4189	19920519
	W: CA, JP				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, MC, NL, SE				
	US 5292726	A	19940308	US 1992-885416	19920519
PRAI	US 1991-703953	A	19910522		
	US 1992-885416	A	19920519		
OS	MARPAT 118:234089				
GI					



AB Title compds. I [X, X1 = CH, N; XRR1 = OR; R = H, alkyl, (un)substituted Ph, phenylalkyl; R1 = H, alkyl, (un)substituted Ph, phenylalkyl, cycloalkyl; R2 = (un)substituted alkyl, CO2H; R3 = H, (un)substituted alkyl, CO2H; R4, R5 = (un)substituted Ph] were prepared for use in treating cognitive dysfunction and as anxiolytics, antidepressants, antidopaminergics, and Ca channel blockers (no data). Thus, (+)-4-benzyloxycarbonyl-2-piperazinecarboxylic acid was treated with Ph2NCOCl, deblocked, and treated with [Me(CH2)4]2NCOCl to give the

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dicarbamoylpiperazine II.

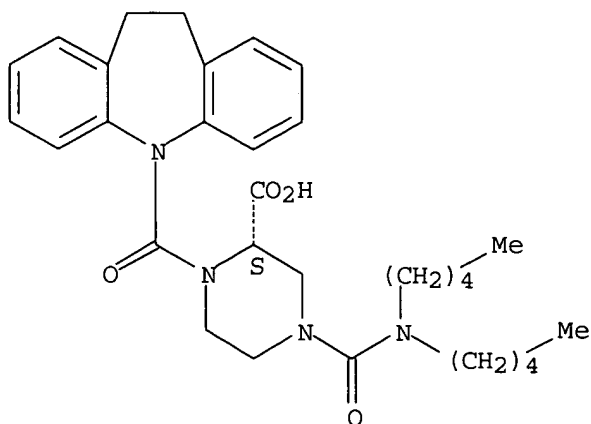
IT **147145-54-8P**

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 147145-54-8 CAPLUS

CN 2-Piperazinecarboxylic acid, 1-[(10,11-dihydro-5H-dibenz[b,f]azepin-5-yl)carbonyl]-4-[(dipentylamino)carbonyl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L4 ANSWER 23 OF 25 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1992:83590 CAPLUS

DN 116:83590

TI Synthesis and biological activity of certain alkyl 5-(alkoxycarbonyl)-1H-benzimidazole-2-carbamates and related derivatives: a new class of potential antineoplastic and antifilarial agents

AU Ram, Siya; Wise, Dean S.; Wotring, Linda L.; McCall, John W.; Townsend, Leroy B.

CS Coll. Pharm., Univ. Michigan, Ann Arbor, MI, 48109-1065, USA

SO Journal of Medicinal Chemistry (1992), 35(3), 539-47

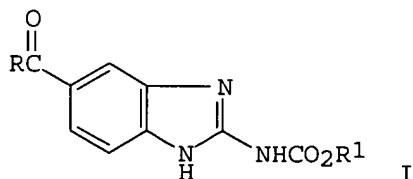
CODEN: JMCMAR; ISSN: 0022-2623

DT Journal

LA English

OS CASREACT 116:83590

GI



AB The 2-(alkoxycarbonylamino)-1H-benzimidazole-5-carboxylates I (R = HO, MeO, EtO, PrO, cyclopropylmethoxy, 2-propynyloxy, thienylmethoxy, fluorobenzyloxy, etc.; R1 = Me, Et, Pr, iso-Bu, cyclopropylmethyl) and the 2-(alkoxycarbonylamino)-1H-benzimidazole-5-carboxamides I (R = EtNH, Me2CHNH, Me3CCH2N, piperazino, morpholino, etc.; R1 = Me) were prepared from the resp. (alkoxycarbonylamino)-1H-benzimidazole-5-carbonyl chlorides and tested for their antineoplastic and antifilarial activity. Growth inhibition of L1210 cells appeared to be associated with mitotic cell

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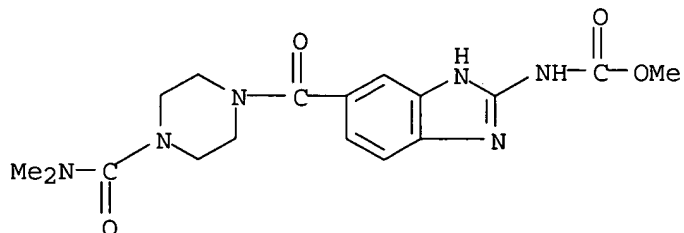
spindling; the IC50 for growth inhibition of L1210 cells was 0.70  $\mu$ M for I (R = Me2CHO, R1 = Me) (II). II also had antifilarial activity against *Brugia pahangi*, *litomosoides carni*, and *Acanthocheilonema viteae*.

IT 135696-89-8P 135696-90-1P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation and antineoplastic and antifilarial activity of)

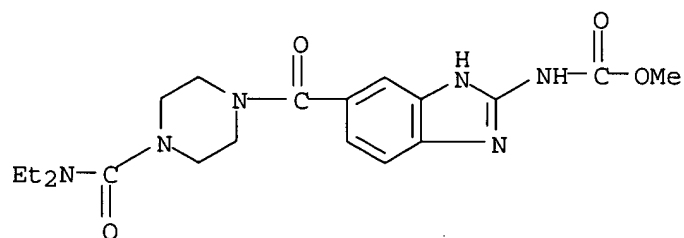
RN 135696-89-8 CAPLUS

CN Carbamic acid, [5-[[4-[(dimethylamino)carbonyl]-1-piperazinyl]carbonyl]-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)



RN 135696-90-1 CAPLUS

CN Carbamic acid, [5-[[4-[(diethylamino)carbonyl]-1-piperazinyl]carbonyl]-1H-benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)



L4 ANSWER 24 OF 25 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1980:408085 CAPLUS

DN 93:8085

TI Synthesis of benzimidazole-2-carboxamides as potential anthelmintic agents

AU Rastogi, Rashmi; Sharma, Satyavan; Iyer, R. N.

CS Med. Chem. Div., Cent. Drug Res. Inst., Lucknow, 226 001, India

SO Indian Journal of Chemistry, Section B: Organic Chemistry Including Medicinal Chemistry (1979), 18B(5), 464-7

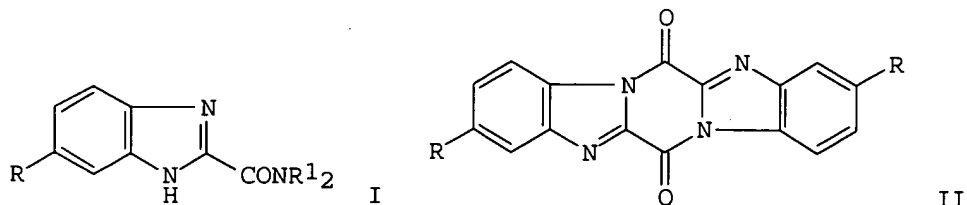
CODEN: IJSBDB; ISSN: 0376-4699

DT Journal

LA English

OS CASREACT 93:8085

GI





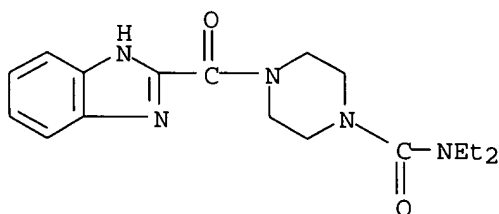
AB The benzimidazole-2-carboxamides I [R = H, Cl, NO<sub>2</sub>; R<sub>21</sub>N = (un)substituted piperazino, piperidino, pyrrolidino, etc.] were synthesized by the nucleophilic reaction of the corresponding amines with bisbenzimidazopyrazinediones II. Hydrolysis of II (R = H, R<sub>12</sub> = 4-carbethoxypiperazino) gave II (R = H, R<sub>12</sub> = piperazino). II did not have antihookworm activity against *Nippostrongylus brasiliensis* in rats and *Nematospiroides dubius* in mice. II are also inactive against various strains of bacteria and fungi.

IT **73903-11-4P**

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 73903-11-4 CAPLUS

CN 1-Piperazinecarboxamide, 4-(1H-benzimidazol-2-ylcarbonyl)-N,N-diethyl-  
(9CI) (CA INDEX NAME)



L4 ANSWER 25 OF 25 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1972:72559 CAPLUS

DN 76:72559

TI 1,4-Bis(phthalimidocarbonyl)piperazines

IN Grigat, Ernst

PA Farbenfabriken Bayer A.-G.

SO Ger. Offen., 12 pp. Addn. to Ger. Offen. 1,936,127 (CA 74;87642k).

CODEN: GWXXBX

DT Patent

LA German

FAN. CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2023078	A	19711125	DE 1970-2023078	19700512
PRAI	DE 1970-2023078	A	19700512		

GI For diagram(s), see printed CA Issue.

AB The title compds. [I, R = H, R<sub>1</sub> = H (II) or Me and R = Cl, R<sub>1</sub> = H], useful as plant protecting agents, were prepared by reaction of phthalic anhydride (III) or its tetrachloro derivative with N,N'-dicyanopiperazine (IV) or its 2,5-dimethyl derivative, resp. Thus, 0.2 mole III and 0.1 mole IV was refluxed 2.5 hr in xylene to give 21 g II.

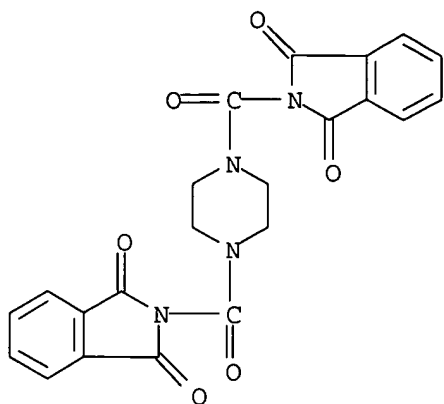
IT **35305-84-1P 35305-85-2P 35305-86-3P**

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 35305-84-1 CAPLUS

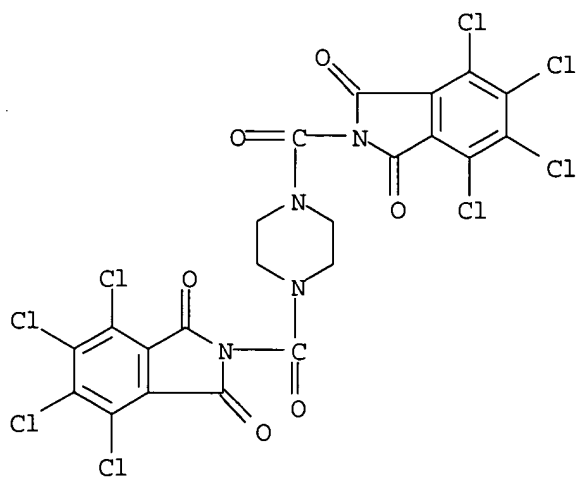
CN 1H-Isoindole-1,3(2H)-dione, 2,2'-(1,4-piperazinediylldicarbonyl)bis- (9CI)  
(CA INDEX NAME)

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RN 35305-85-2 CAPLUS

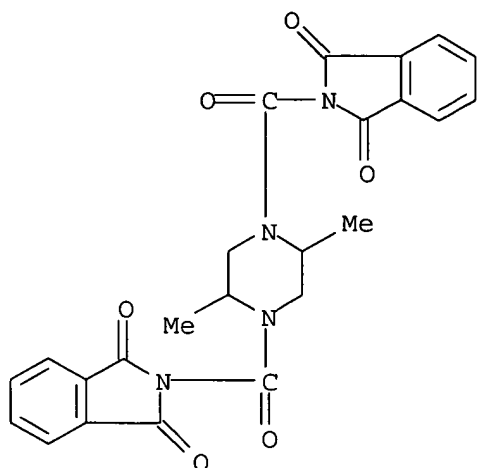
CN 1H-Isoindole-1,3(2H)-dione, 2,2'-(1,4-piperazinediyl)bis[4,5,6,7-tetrachloro- (9CI) (CA INDEX NAME)



RN 35305-86-3 CAPLUS

CN 1H-Isoindole-1,3(2H)-dione, 2,2'-[(2,5-dimethyl-1,4-piperazinediyl)dicarbonyl]bis- (9CI) (CA INDEX NAME)

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ENTRY	SESSION
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IN U.S. DOLLARS

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BER PRICE

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0.43	290.40

SINCE FILE	TOTAL
ENTRY	SESSION
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